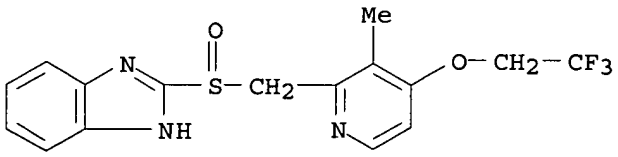
```
=> s lansoprazole
L1             7 LANSOPRAZOLE

=> d 1-7
```

L1 ANSWER 1 OF 7 REGISTRY COPYRIGHT 2001 ACS
RN 209852-75-5 REGISTRY
CN Erythromycin, 6-O-methyl-, mixt. with 2-methyl-5-nitro-1H-imidazole-1-ethanol and 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazole (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-, mixt. contg. (9CI)
CN 1H-Imidazole-1-ethanol, 2-methyl-5-nitro-, mixt. contg. (9CI)
OTHER NAMES:
CN **Clarithromycin-lansoprazole-metronidazole mixt.**
FS STEREOSEARCH
MF C38 H69 N O13 . C16 H14 F3 N3 O2 S . C6 H9 N3 O3
CI MXS
SR CA
LC STN Files: CA, CAPLUS, TOXLIT

CM 1

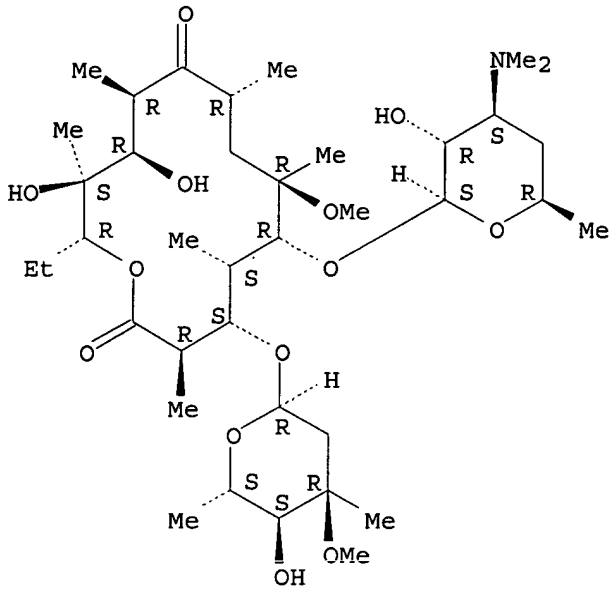
CRN 103577-45-3
CMF C16 H14 F3 N3 O2 S



CM 2

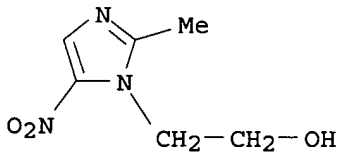
CRN 81103-11-9
CMF C38 H69 N O13

Absolute stereochemistry.



CM 3

CRN 443-48-1
CMF C6 H9 N3 O3

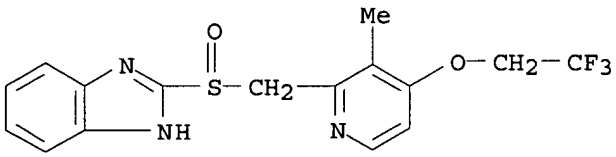


1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L1 ANSWER 2 OF 7 REGISTRY COPYRIGHT 2001 ACS
RN 209852-74-4 REGISTRY
CN Erythromycin, 6-O-methyl-, mixt. with [2S-[2.alpha.,5.alpha.,6.beta.(S*)]]-6-[[amino(4-hydroxyphenyl)acetyl]amino]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid and 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazole (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-, mixt. contg. (9CI)
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-[[amino(4-hydroxyphenyl)acetyl]amino]-3,3-dimethyl-7-oxo-, [2S-[2.alpha.,5.alpha.,6.beta.(S*)]]-, mixt. contg. (9CI)
OTHER NAMES:
CN **Clarithromycin-lansoprazole-amoxicillin mixt.**
FS STEREOSEARCH
MF C38 H69 N O13 . C16 H19 N3 O5 S . C16 H14 F3 N3 O2 S
CI MXS
SR CA
LC STN Files: CA, CAPLUS, TOXLIT

CM 1

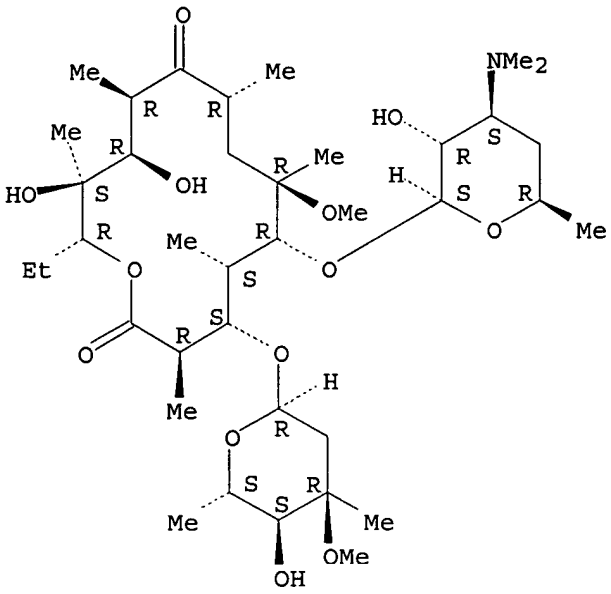
CRN 103577-45-3
CMF C16 H14 F3 N3 O2 S



CM 2

CRN 81103-11-9
CMF C38 H69 N O13

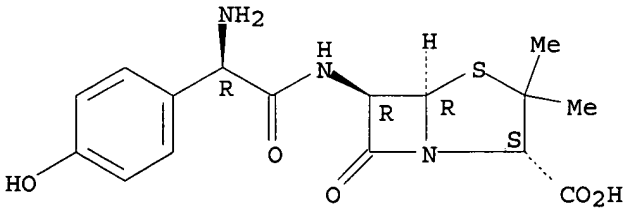
Absolute stereochemistry.



CM 3

CRN 26787-78-0
CMF C16 H19 N3 O5 S

Absolute stereochemistry.

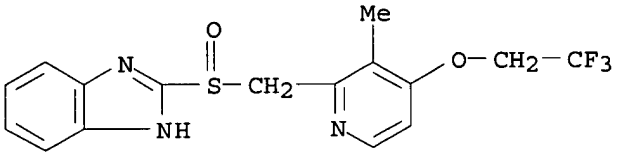


1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L1 ANSWER 3 OF 7 REGISTRY COPYRIGHT 2001 ACS
RN 209852-73-3 REGISTRY
CN Erythromycin, 6-O-methyl-, mixt. with 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazole (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-, mixt. contg. (9CI)
OTHER NAMES:
CN **Clarithromycin-lansoprazole mixt.**
FS STEREOSEARCH
MF C38 H69 N O13 . C16 H14 F3 N3 O2 S
CI MXS
SR CA
LC STN Files: CA, CAPLUS, TOXLIT

CM 1

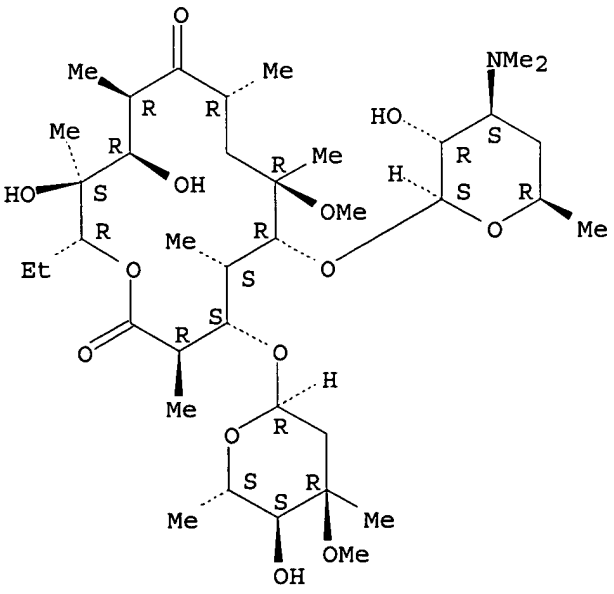
CRN 103577-45-3
CMF C16 H14 F3 N3 O2 S



CM 2

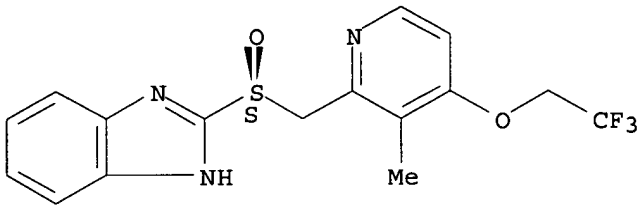
CRN 81103-11-9
CMF C38 H69 N O13

Absolute stereochemistry.



L1 ANSWER 4 OF 7 REGISTRY COPYRIGHT 2001 ACS
RN 138530-95-7 REGISTRY
CN 1H-Benzimidazole, 2-[(S)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-, (S)-
OTHER NAMES:
CN **(-)-Lansoprazole**
CN **(S)-Lansoprazole**
FS STEREOSEARCH
MF C16 H14 F3 N3 O2 S
CI COM
SR CA
LC STN Files: ADISNEWS, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAPLUS, CASREACT, CIN, DRUGNL, DRUGPAT, DRUGUPDATES, IPA, PHAR, TOXLINE, TOXLIT, USPATFULL
(*File contains numerically searchable property data)

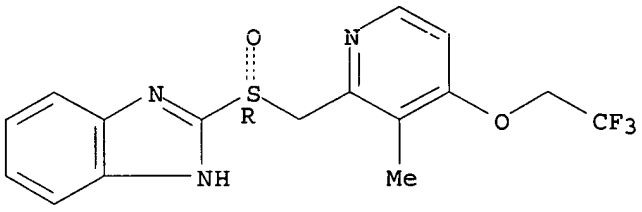
Absolute stereochemistry. Rotation (-).



21 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
21 REFERENCES IN FILE CAPLUS (1967 TO DATE)

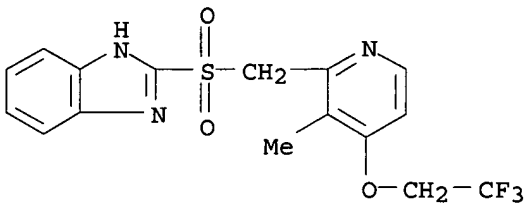
L1 ANSWER 5 OF 7 REGISTRY COPYRIGHT 2001 ACS
RN 138530-94-6 REGISTRY
CN 1H-Benzimidazole, 2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-, (R)-
OTHER NAMES:
CN **(+)-Lansoprazole**
CN **R-(+)-Lansoprazole**
FS STEREOSEARCH
MF C16 H14 F3 N3 O2 S
CI COM
SR CA
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, DRUGPAT, DRUGUPDATES, IPA, TOXLINE, TOXLIT, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (+).



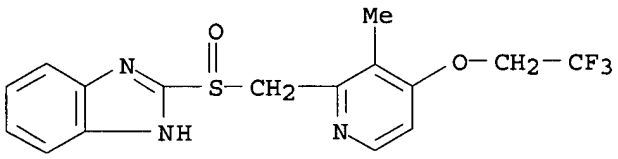
19 REFERENCES IN FILE CA (1967 TO DATE)
19 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L1 ANSWER 6 OF 7 REGISTRY COPYRIGHT 2001 ACS
RN 131926-99-3 REGISTRY
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfonyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN AG 1813
CN **Lansoprazole sulfone**
FS 3D CONCORD
MF C16 H14 F3 N3 O3 S
SR CA
LC STN Files: BIOSIS, CA, CAPLUS, TOXLIT



15 REFERENCES IN FILE CA (1967 TO DATE)
15 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L1 ANSWER 7 OF 7 REGISTRY COPYRIGHT 2001 ACS
RN 103577-45-3 REGISTRY
CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN **(.+-.)-Lansoprazole**
CN A 65006
CN AG 1749
CN **Lansoprazole**
CN PP/K-10
CN Prevacid
FS 3D CONCORD
DR 154727-72-7
MF C16 H14 F3 N3 O2 S
CI COM
SR CA
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CHEMCATS, CIN, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK*, PHAR, PROMT, RTECS*, SYNTHLINE, TOXLINE, TOXLIT, USAN, USPATFULL
(*File contains numerically searchable property data)
Other Sources: WHO



594 REFERENCES IN FILE CA (1967 TO DATE)
8 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
597 REFERENCES IN FILE CAPLUS (1967 TO DATE)

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=> s 103577-45-3/rn
L2            1 103577-45-3/RN

=> s l2
L3          599 L2

=> s proton?
L4       310457 PROTON?

=> s l3 and l4
L5          270 L3 AND L4

=> s proton pump
         236969 PROTON
          80427 PUMP
L6         3234 PROTON PUMP
                (PROTON(W)PUMP)

=> s l6 and l3
L7          259 L6 AND L3

=> s gastrointest?
L8        36830 GASTROINTEST?

=> s l7 and l8
L9           25 L7 AND L8

=> d l9 1-25 bib,kwic
```

L9 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 2000:895185 CAPLUS
DN 134:174137
TI Hypochlorhydria induced by a **proton pump** inhibitor leads to intragastric microbial production of acetaldehyde from ethanol
AU Vakevainen, S.; Tillonen, J.; Salaspuro, M.; Jousimies-Somer, H.; Nuutinen, H.; Farkkila, M.
CS Research Unit of Alcohol Diseases, Helsinki University Central Hospital, Helsinki, Finland
SO Aliment. Pharmacol. Ther. (2000), 14(11), 1511-1518
CODEN: APTHEN; ISSN: 0269-2813
PB Blackwell Science Ltd.
DT Journal
LA English
RE.CNT 52
RE
(1) Baraona, E; Gastroenterology 1986, V90, P103 CAPLUS
(9) Dellarco, V; Mutat Res 1988, V195, P1 CAPLUS
(14) Helander, A; Mutat Res 1991, V264, P103 CAPLUS
(17) Homann, N; J Natl Cancer Inst 1997, V89, P1692 CAPLUS
(19) Jokelainen, K; Alcohol Clin Exp Res 1996, V20, P967 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT
TI Hypochlorhydria induced by a **proton pump** inhibitor leads to intragastric microbial production of acetaldehyde from ethanol
AB Acetaldehyde, produced locally in the digestive tract, has recently been shown to be carcinogenic in humans. The effect of iatrogenic hypochlorhydria was examd. on intragastric acetaldehyde prodn. from ethanol after a moderate dose of alc.; the findings of changes in gastric flora are given. Eight male volunteers ingested ethanol 0.6 g/kg b.w. The pH, acetaldehyde level and microbial counts of the gastric juice were then detd. The expt. was repeated after 7 days of lansoprazole 30 mg b.d. The mean (.+-. S.E.M.) pH of the gastric juice was 1.3 .+-. 0.06 and 6.1 .+-. 0.5 ($P < 0.001$) before and after lansoprazole, resp. This was assocd. with a marked overgrowth of gastric aerobic and anaerobic bacteria ($P < 0.001$), by a 2.5-fold ($P = 0.003$) increase in gastric juice acetaldehyde level after ethanol ingestion, and with a pos. correlation ($r = 0.90$, $P < 0.001$) between gastric juice acetaldehyde concn. and the count of aerobic bacteria. Treatment with **proton pump** inhibitors leads to hypochlorhydria, which assocs. with intragastric overgrowth of aerobic bacteria and microbially-mediated acetaldehyde prodn. from ethanol. Since acetaldehyde is a local carcinogen in the concns. found in this study, long-term use of gastric acid secretory inhibitors is a potential risk-factor for gastric and cardiac cancers.
IT Stomach, disease
(anacidity; hypochlorhydria induced by **proton pump** inhibitor leads to intragastric microbial prodn. of acetaldehyde from ethanol)
IT Bacteria (Eubacteria)
(**gastrointestinal**; hypochlorhydria induced by **proton pump** inhibitor leads to intragastric microbial prodn. of acetaldehyde from ethanol)
IT Carcinogens
Gastric juice
(hypochlorhydria induced by **proton pump** inhibitor leads to intragastric microbial prodn. of acetaldehyde from ethanol)
IT 75-07-0, Acetaldehyde, biological studies
RL: ADV (Adverse effect, including toxicity); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(hypochlorhydria induced by **proton pump** inhibitor leads to intragastric microbial prodn. of acetaldehyde from ethanol)

IT **103577-45-3**, Lansoprazole
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(hypochlorhydria induced by **proton pump** inhibitor leads to intragastric microbial prodn. of acetaldehyde from ethanol)

IT 64-17-5, Ethanol, biological studies 12408-02-5, Hydrogen ion, biological studies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(hypochlorhydria induced by **proton pump** inhibitor leads to intragastric microbial prodn. of acetaldehyde from ethanol)

L9 ANSWER 2 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 2000:627972 CAPLUS
DN 133:213185
TI Methods and compositions using (-)-norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists
IN Rubin, Paul D.; Barberich, Timothy J.
PA Sepracor Inc., USA
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000051584	A2	20000908	WO 2000-US5167	20000301

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-122393 P 19990302
TI Methods and compositions using (-)-norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists
AB The invention relates to methods and compns. for the prevention, treatment, or management of **gastrointestinal** disorders or symptoms thereof, employing two or more agents or compds. to provide a triple site action on 5-HT3 receptors, 5-HT4 receptors, and at least one of H2 receptors and proton pumps. The IC50 of (-)-norcisapride for binding to 5HT3 was 30.4 nM. A tablet contained (-)-norcisapride 5.0, lansoprazole 5.0, lactose 57.0, starch 20.0, microcryst. cellulose 10.0, hydrogenated vegetable oil 1.5, and polyvinylpyrrolidinone 1.5 mg.
ST norcisapride **proton pump** inhibitor tablet
lansoprazole; histamine receptor antagonist norcisapride tablet
IT 5-HT antagonists
(5-HT3; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT 5-HT receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(5-HT4, agonists and antagonists; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Antihistamines
(H2; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Pancreas, neoplasm
(Zollinger-Ellison syndrome; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Drug delivery systems
(capsules; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Intestine, disease
(constipation; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Digestive tract

(disease; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT **Gastrointestinal** motility
(disorder, dysmotility; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Esophagus
(esophagitis, erosive; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Digestive tract
(gastroesophageal reflux; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Stomach, disease
(gastroparesis; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Drug delivery systems
(granules; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Intestine, disease
(ileus, post-operative; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Digestive tract
(indigestion; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Dyspepsia
Vomiting
(methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Drug delivery systems
(oral; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Drug delivery systems
(parenterals; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Digestive tract
(pyrosis; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Drug delivery systems
(rectal; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Gastric acid
(secretion, hyper-; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Stomach
(sour; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Drug delivery systems
(sublingual; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Drug delivery systems
(tablets; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Drug delivery systems

(transdermal; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)

IT Digestive tract
(ulcer; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)

IT 51481-61-9, Cimetidine 66357-35-5, Ranitidine 73590-58-6, Omeprazole 76824-35-6, Famotidine 76963-41-2, Nizatidine 81098-60-4, (.+-.)-Cisapride 84946-16-7 86718-70-9, (+)-Cisapride 86719-31-5, (-)-Cisapride 92340-57-3, Hydroxyomeprazole 99614-60-5 102625-70-7, Pantoprazole 102625-70-7D, Pantoprazole, desmethyl derivs. **103577-45-3**, Lansoprazole 117976-89-3, Rabeprazole 186260-03-7, (-)-Norcisapride 202590-69-0, (+)-Norcisapride 290837-87-5
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)

IT 9000-83-3
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(proton-translocating, inhibitors; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)

L9 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 2000:627971 CAPLUS
DN 133:213184
TI Methods and compositions using (+)-norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists
IN Rubin, Paul D.; Barberich, Timothy J.
PA Sepracor Inc., USA
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000051583	A2	20000908	WO 2000-US5166	20000301
	WO 2000051583	A3	20010201		

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RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-122394 P 19990302
TI Methods and compositions using (+)-norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists
AB The invention relates to methods and compns. for the prevention, treatment, or management of **gastrointestinal** disorders or symptoms thereof, employing two or more agents or compds. to provide a triple site action on 5-HT3 receptors, 5-HT4 receptors, and at least one of H2 receptors and proton pumps. The IC50 of (+)-norcisapride for binding to 5HT3 was 4.5 nM. A tablet contained (+)-norcisapride 5.0, lansoprazole 5.0, lactose 57.0, starch 20.0, microcryst. cellulose 10.0, hydrogenated vegetable oil 1.5, and polyvinylpyrrolidinone 1.5 mg.
ST norcisapride **proton pump** inhibitor tablet
lansoprazole; histamine receptor antagonist norcisapride tablet
IT 5-HT antagonists
(5-HT3; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT 5-HT receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(5-HT4, agonists and antagonists; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Antihistamines
(H2; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Pancreas, neoplasm
(Zollinger-Ellison syndrome; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Drug delivery systems
(capsules; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Intestine, disease
(constipation; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)

IT Digestive tract
(disease; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT **Gastrointestinal** motility
(disorder, dysmotility; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Esophagus
(esophagitis, erosive; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Digestive tract
(gastroesophageal reflux; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Stomach, disease
(gastroparesis; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Drug delivery systems
(granules; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Intestine, disease
(ileus, post-operative; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Digestive tract
(indigestion; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Dyspepsia
Vomiting
(methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Drug delivery systems
(oral; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Drug delivery systems
(parenterals; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Digestive tract
(pyrosis; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Drug delivery systems
(rectal; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Gastric acid
(secretion, hyper-; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Stomach
(sour; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Drug delivery systems
(sublingual; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)
IT Drug delivery systems
(tablets; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)

IT Drug delivery systems
(transdermal; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)

IT Digestive tract
(ulcer; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)

IT 51481-61-9, Cimetidine 66357-35-5, Ranitidine 73590-58-6, Omeprazole 76824-35-6, Famotidine 76963-41-2, Nizatidine 81098-60-4, (.+-.)-Cisapride 84946-16-7 86718-70-9, (+)-Cisapride 86719-31-5, (-)-Cisapride 92340-57-3, Hydroxyomeprazole 99614-60-5 102625-70-7, Pantoprazole 102625-70-7D, Pantoprazole, desmethyl derivs. **103577-45-3**, Lansoprazole 117976-89-3, Rabeprazole 186260-03-7, (-)-Norcisapride 202590-69-0, (+)-Norcisapride 290837-87-5
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)

IT 9000-83-3
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(proton-translocating, inhibitors; methods and compns. using norcisapride in combination with **proton pump** inhibitors or H2 receptor antagonists)

L9 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 2000:608578 CAPLUS
DN 133:203023
TI Nitrosated and nitrosylated **proton pump** inhibitors, compositions and methods of use
IN Garvey, David S.; Letts, L. Gordon; Tam, Sang William; Wang, Tiansheng; Richardson, Stewart K.
PA Nitromed, Inc., USA
SO PCT Int. Appl., 100 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000050037	A1	20000831	WO 2000-US2524	20000225

PI
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-122111 P 19990226
OS MARPAT 133:203023
RE.CNT 2
RE
(1) Eek; US 5599794 A 1997 CAPLUS
(2) Eek; US 5629305 A 1997 CAPLUS
TI Nitrosated and nitrosylated **proton pump** inhibitors, compositions and methods of use
AB The invention describes nitrosated and/or nitrosylated **proton pump** inhibitor compds., as well as compns. comprising .gtoreq.1 **proton pump** inhibitor compd. that is optionally substituted with .gtoreq.1 NO and/or NO2 group, and, optionally, .gtoreq.1 compd. that donates, transfers or releases nitric oxide, stimulates endogenous synthesis of nitric oxide, elevates endogenous levels of endothelium-derived relaxing factor, or is a substrate for nitric oxide synthase, and/or .gtoreq.1 nonsteroidal antiinflammatory drug, selective COX-2 inhibitor antacid, bismuth-contg. reagent, acid-degradable antibacterial compd., and mixts. thereof. The invention also provides methods for treating and/or preventing **gastrointestinal** disorders; facilitating ulcer healing; decreasing the recurrence of ulcers; improving gastroprotective properties, anti-Helicobacter pylori properties or antacid properties of **proton pump** inhibitors; decreasing or reducing the **gastrointestinal** toxicity assocd. with the use of nonsteroidal antiinflammatory compds.; and treating Helicobacter pylori and viral infections. The compds. and/or compns. of the present invention can also be provided in the form of a pharmaceutical kit. Prepn. of e.g. nitrosylated lansoprazole is described. Compared to lansoprazole, the nitrosylated lansoprazole significantly inhibited the formation of EtOH/HCl-induced gastric lesions.
ST nitrosated nitrosylated **proton pump** inhibitor therapeutic; **gastrointestinal** drug nitrosated nitrosylated **proton pump** inhibitor; ulcer treatment nitrosated nitrosylated **proton pump** inhibitor; Helicobacter antacid nitrosated nitrosylated **proton pump** inhibitor; viral infection nitrosated nitrosylated **proton pump**

inhibitor; NSAID toxicity nitrosated nitrosylated **proton pump** inhibitor; lansoprazole nitrosylated prepn gastric lesion inhibition

IT Intestine, disease
(Crohn's; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT Nitrosamines
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(N-oxo; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT Thiols (organic), biological studies
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(S-nitroso; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT Pancreas, neoplasm
(Zollinger-Ellison syndrome; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT Antibacterial agents
(acid-degradable; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT Leukemia
(basophilic, hypersecretory state assocd. with; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT Intestine, disease
(colitis; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT Helicobacter pylori
(disease assocd. with; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT Intestine, disease
(diverticulitis; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT Antiulcer agents
(duodenal; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT Intestine, disease
(enteritis, infectious; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT Digestive tract
(gastroesophageal reflux; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT Drugs
(**gastrointestinal**; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT Stomach, disease
(gastroparesis; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT Gastric acid
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(hyperacidity; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT Intestine, disease
(inflammatory; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT Intestine, disease
(irritable bowel syndrome; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT Mast cell
(mastocytoma, systemic, hypersecretory state assocd. with; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)
IT Adenoviridae
Antacids
Antiulcer agents
Antiviral agents
Arenaviridae
Bunyaviridae
Coronaviridae
Cytomegalovirus
Drug delivery systems
Dyspepsia
Herpesviridae
Human herpesvirus
Human herpesvirus 3
Human herpesvirus 4
Human herpesvirus 6
Human herpesvirus 7
Orthomyxoviridae
Papovaviridae
Paramyxoviridae
Picornaviridae
Poxviridae
Pseudorabies virus
Retroviridae
Rhabdoviridae
Togaviridae
(nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)
IT Amino acids, biological studies
Carbohydrates, biological studies
Heterocyclic compounds
Hydrocarbons, biological studies
Oligonucleotides
Proteins, general, biological studies
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nitrosylated; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)
IT Anti-inflammatory agents
(nonsteroidal; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)
IT Toxicity
(of NSAIDs and COX-2 inhibitors; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)
IT Antiulcer agents
(peptic; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)
IT Virus
(rhinotracheitis; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)
IT Intestine, disease
(short bowel syndrome; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)
IT Stress, animal
(stress ulcer, inhibitors; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT Intestine, disease
(ulcerative colitis; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)
IT 39391-18-9
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(cyclooxygenase-2, inhibitors; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)
IT 51-45-6, Histamine, biological studies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(hyperhistaminemia, hypersecretory state assocd. with; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)
IT 125978-95-2, Nitric oxide synthase
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BIOL (Biological study); PROC (Process)
(nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)
IT 51-17-2D, Benzimidazole, nitrosated and nitrosylated derivs. 56-85-9, Glutamine, biological studies 56-87-1, Lysine, biological studies 70-26-8, Ornithine 74-79-3, L-Arginine, biological studies 74-79-3D, L-Arginine, nitrosated and nitrosylated derivs. 91-22-5D, Quinoline, nitrosated and nitrosylated derivs. 156-86-5, L-Homoarginine 253-82-7D, Quinazoline, nitrosated and nitrosylated derivs. 271-63-6D, 1H-Pyrrolo[2,3-b]pyridine, nitrosated and nitrosylated derivs. 273-21-2D, 1H-Imidazo[4,5-b]pyridine, nitrosated and nitrosylated derivs. 274-76-0D, Imidazo[1,2-a]pyridine, nitrosated and nitrosylated derivs. 288-32-4D, Imidazole, nitrosated and nitrosylated derivs. 289-06-5D, Thiadiazole, nitrosated and nitrosylated derivs. 289-95-2D, Pyrimidine, nitrosated and nitrosylated derivs. 372-75-8, Citrulline 504-77-8D, 4,5-Dihydrooxazole, nitrosated and nitrosylated derivs. 578-68-7D, 4-Aminoquinoline, nitrosated and nitrosylated derivs. 7440-69-9D, Bismuth, compds. 17038-52-7D, 1,2,4-Thiadiazolo[4,5-a]benzimidazole, nitrosated and nitrosylated derivs. 51209-75-7, S-Nitrosocysteine 53054-07-2 53054-07-2D, nitrosated and nitrosylated derivs. 56577-02-7, S-Nitroso-N-acetylcysteine 57237-97-5D, Timoprazole, nitrosated and nitrosylated derivs. 57564-91-7, S-Nitrosoglutathione 57564-91-7D, derivs. 73590-58-6D, Omeprazole, nitrosated and nitrosylated derivs. 79032-48-7, S-Nitroso-N-acetylpenicillamine 85330-45-6D, nitrosated and nitrosylated derivs. 99499-40-8D, Disuprazole, nitrosated and nitrosylated derivs. 101387-97-7D, RO 18-5362, nitrosated and nitrosylated derivs. 102625-70-7D, Pantoprazole, nitrosated and nitrosylated derivs. **103577-45-3D**, Lansoprazole, nitrosated and nitrosylated derivs. 104340-86-5D, Leminoprazole, nitrosated and nitrosylated derivs. 113712-98-4D, Tenatoprazole, nitrosated and nitrosylated derivs. 117976-89-3D, Rabeprazole, nitrosated and nitrosylated derivs. 121617-11-6D, Hoe-731, nitrosated and nitrosylated derivs. 122130-63-6, S-Nitrosocaptopril 125500-29-0D, nitrosated and nitrosylated derivs. 139427-42-2, S-Nitrosohomocysteine 172152-36-2D, IY 81149, nitrosated and nitrosylated derivs. 172152-45-3D, nitrosated and nitrosylated derivs. 178307-42-1D, YH 1885, nitrosated and nitrosylated derivs. 216382-88-6D, Imidazopyridine, nitrosated and nitrosylated derivs.
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)
IT 10102-43-9, Nitric oxide, biological studies 90880-94-7, Endothelium-derived relaxing factor
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)

(nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT 9000-83-3, ATPase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT 23695-65-0P, Adamantane-2-thione 154150-97-7P 260268-02-8P 260268-03-9P 260268-08-4P 290291-78-0P 290291-79-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

IT 100-46-9, Benzylamine, reactions 108-30-5, reactions 540-80-7, tert-Butyl nitrite 540-88-5, tert-Butyl acetate 700-58-3, Adamantan-2-one 15581-80-3, .alpha.,.alpha.'-Dithiodiisobutyraldehyde 57237-97-5, Timoprazole **103577-45-3**, Lansoprazole
RL: RCT (Reactant)
(reaction; nitrosated and nitrosylated **proton pump** inhibitors, compns., combinations, and methods of use)

L9 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 2000:450606 CAPLUS
DN 133:68386
TI Comparison of seven and fourteen days of lansoprazole, clarithromycin, and amoxicillin therapy for eradication of Helicobacter pylori: a report from India
AU Bhasin, Deepak Kumar; Sharma, Brijesh Chander; Ray, Pallab; Pathak, Chander Mohan; Singh, Kartar
CS Departments of Gastroenterology, Postgraduate Institute of Medical Education and Research, Chandigarh, India
SO Helicobacter (2000), 5(2), 84-87
CODEN: HELIFL; ISSN: 1083-4389
PB Blackwell Science, Inc.
DT Journal
LA English
RE.CNT 31
RE
(7) Cammarota, G; Aliment Pharmacol Ther 1996, V10, P997 CAPLUS
(11) Fennerty, M; Arch Intern Med 1998, V158, P1651 CAPLUS
(20) Lim, A; Aliment Pharmacol Ther 1997, V11, P537 CAPLUS
(23) Misiewicz, J; Gut 1997, V41, P735 CAPLUS
(27) Schwartz, H; Am J Gastroenterol 1998, V93, P584 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT
AB Background: In developed countries, a 1-wk regimen of combined **proton pump** inhibitors and two antibiotics is considered adequate for Helicobacter pylori eradication. However, there is a paucity of reports from developing countries on treatment duration of less than 14 days. We compared efficacy of 7 and 14 days of lansoprazole (L), clarithromycin (C), and amoxicillin (A) combinations for eradication of H. pylori. Patients and Methods: Forty-six consecutive patients who presented with upper **gastrointestinal** symptoms and tested pos. for H. pylori infection were included in the study. In every patient, after performance of upper **gastrointestinal** endoscopy, antral biopsies were obtained. H. pylori infection was diagnosed by pos. rapid urease test and identification of organisms on antral histol. Patients were randomly selected to receive lansoprazole, 30 mg once daily, plus clarithromycin, 250 mg twice daily, plus amoxicillin, 500 mg three times daily for 2 wk (group 1; n = 24; age, 36.+-.12 yr; 18 men) or 1 wk (group 2; n = 22; age, 45.+-.15 yr; 12 men). One month after completion of treatment, repeat upper **gastrointestinal** endoscopy was performed. H. pylori eradication was defined as absence of organism on histopathol. examn. of both antrum and body of stomach and neg. rapid urease test. Results: Eradication rate was higher in group 1 (23 of 24; 96%) as compared to group 2 (12 of 22; 54%; p <.05). One patient in group 1 had diarrhea, and one patient in group two had skin rash and itching. Conclusions: Fourteen-day therapy with lansoprazole, clarithromycin, and amoxicillin is highly effective in eradication of H. pylori. Reducing duration of therapy to 7 days significantly lowers eradication rates.
ST lansoprazole clarithromycin amoxicillin Helicobacter antibacterial; **proton pump** inhibitor antibacterial Helicobacter
IT 26787-78-0, Amoxicillin 81103-11-9, Clarithromycin **103577-45-3**, Lansoprazole
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(comparison of seven and fourteen days of lansoprazole, clarithromycin and amoxicillin therapy for eradication of Helicobacter pylori in humans)

L9 ANSWER 6 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 2000:420958 CAPLUS
DN 133:48897
TI Pharmaceutical formulations containing prostaglandin analogs and calcium channel blockers and ATPase inhibitors
IN Eek, Arne; Josefsson, Lars; Lundberg, Per Johan; Pilbrant, Ake
PA Astrazeneca AB, Swed.
SO PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000035448	A1	20000622	WO 1999-SE2315	19991210

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI SE 1998-4314 A 19981214

AB This invention is related to new oral pharmaceutical dosage forms comprising a **proton pump** inhibitor, i.e. a H+, K+ -ATPase inhibitor, a gastric antisecretory prostaglandin analog, and optionally an addnl. drug such as a calcium channel blocker, esp. for use in the treatment and prophylaxis of **gastrointestinal** disorders. More specifically the invention is related to new dosage forms comprising omeprazole and misoprostol. The invention is also related to a combination of the 3 categories of drugs, i.e., the H+, K+ -ATPase inhibitors, the gastric antisecretory prostaglandin analogs, and the calcium channel blockers. The invention also refers to a method for the manuf. of the described dosage forms and their uses in medicine, as well as blister packs comprising these drugs. Extended-release granules were prepd. from misoprostol 0.4, felodipine 10, Cremophor RH-40 10, EtOH 400, HPMC 400, and sodiumstearyl fumarate 4%. Two-layer tablets contained misoprostol 400 .mu.g, felodipine 10, and omeprazole 20 mg and these tablets were coated with a soln. of HPMC and PEG having pigments dispersed therein.

IT 77-90-7, Acetyl tributyl citrate 77-93-0, Triethyl citrate 151-21-3, SLS, biological studies 557-04-0 4070-80-8, Sodium stearyl fumarate 9004-57-3, Ethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, HPMC 9005-65-6, Polysorbate 80 9050-31-1, Hydroxypropyl methyl cellulose phthalate 14807-96-6, Talc, biological studies 21829-25-4, Nifedipine 25212-88-8, Eudragit L 30 D-55 31566-31-1, Glycerol monostearate 36653-82-4, Cetanol 59122-46-2, Misoprostol 72509-76-3, Felodipine 73121-56-9, Enprostil 73590-58-6, Omeprazole 81026-63-3, Enisoprost 95382-33-5, Omeprazole magnesium 102625-70-7, Pantoprazole **103577-45-3**, Lansoprazole 161973-10-0, (S)-Omeprazole magnesium
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical formulations contg. prostaglandin analogs and calcium channel blockers and ATPase inhibitors)

L9 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 2000:110125 CAPLUS
DN 132:146476
TI Nasogastric lansoprazole is effective in suppressing gastric acid secretion in critically ill patients
AU Tsai, W.-L.; Poon, S.-K.; Yu, H.-K.; Chang, C.-S.; Yeh, H.-Z.; Ko, C.-W.; Chen, G.-H.
CS Division of Gastroenterology, Taichung Veterans General Hospital, Taichung, 407, Taiwan
SO Aliment. Pharmacol. Ther. (2000), 14(1), 123-127
CODEN: APTHEN; ISSN: 0269-2813
PB Blackwell Science Ltd.
DT Journal
LA English
RE.CNT 28
RE
(2) Balaban, D; Am J Gastroenterol 1997, V92, P79 CAPLUS
(5) Blum, R; Aliment Pharmacol Ther 1998, V12, P321 CAPLUS
(11) Hase, T; Dig Dis Sci 1975, V20, P443 CAPLUS
(12) Hatlebakk, J; Clin Pharmacokinet 1996, V31, P386 CAPLUS
(13) Holt, S; Dig Dis Sci 1991, V36, P385 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT
AB Aim: To evaluate the effect of nasogastric lansoprazole on acid suppression in critically ill patients. Methods: Patients were eligible for the study if they had a nasogastric tube in place and had not received acid-suppressive agents for 3 days prior to enrollment into the study. Patients with active **gastrointestinal** bleeding or a baseline gastric pH > 4.0 were excluded. Patients served as their own controls during a 24 h lead-in period. Lansoprazole 30 mg was administered once daily with water through a nasogastric tube for 2 days. Intragastric pH was measured by continuous 24 h pH-metry for 3 days. Results: Fifteen patients were enrolled into the study. The baseline median 24 h intragastric pH was 2.25.+-.1.01, and increased to 6.70.+-.0.82 (P = 0.001) after 2 days of lansoprazole. Mean percentage of time intragastric pH was .gtoreq. 4.0 was 25.+-.13% at baseline, and increased to 84.+-.14% (P = 0.001) after 2 days of lansoprazole. Conclusions: Nasogastric lansoprazole 30 mg daily is effective in suppressing gastric acid secretion in critically ill patients.
ST lansoprazole antacid **proton pump** inhibitor
IT **103577-45-3**, Lansoprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nasogastric lansoprazole is effective in suppressing gastric acid secretion in critically ill humans)

L9 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 2000:58945 CAPLUS
DN 132:329723
TI Effect of the **proton pump** inhibitor on breath hydrogen and methane concentrations
AU Ohbayashi, Takaharu
CS Department of Internal Medicine, Teikyo University School of Medicine, Japan
SO Teikyo Igaku Zasshi (1999), 22(2), 197-206
CODEN: TIGZDZ; ISSN: 0387-5547
PB Teikyo Daigaku Igakubu
DT Journal
LA Japanese
TI Effect of the **proton pump** inhibitor on breath hydrogen and methane concentrations
AB Anal. of breath hydrogen and methane is a simple and noninvasive technique for estg. intestinal fermn. In this study I investigated the effects of **proton pump** inhibitor (PPI) on breath hydrogen and methane. The breath hydrogen and methane concns. (mean SD) in 29 healthy subjects were 4.68+4.01 ppm and 0.96+1.40 ppm, resp., and they showed an inverse correlation. The breath hydrogen concn. was increased in patients with various **gastrointestinal** diseases including inflammatory bowel diseases, chronic liver diseases and acid related diseases. But the breath methane concn. was increased only in patients with acid related diseases who were taking **proton pump** inhibitor (PPI).
Eight of 10 patients suffering from acid related diseases who had been "methane non -producers (those who do not excrete methane in the breath) " became "methane producers (those who excrete methane in the breath)" after they were treated with PPI. Eight of 10 healthy "methane non-producers" became "methane producers" after they took PPI for 2 wk, and all of them returned to being "methane non-producers" again 2 wk after they stopped taking PPI. In conclusion, PPI converts "methane non-producers" into "methane producers", probably by influencing the intestinal bacterial flora or gas-producing function of certain bacteria.
ST **proton pump** inhibitor respiratory hydrogen methane; digestive tract disease PPI respiratory methane; lansoprazole respiratory methane digestive tract disease
IT Digestive tract
(disease; effect of the **proton pump** inhibitor on breath hydrogen and methane concns.)
IT Respiratory air
(effect of the **proton pump** inhibitor on breath hydrogen and methane concns.)
IT 73590-58-6, Omeprazole **103577-45-3**, Lansoprazole 117976-89-3, Rabeprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effect of the **proton pump** inhibitor on breath hydrogen and methane concns.)
IT 74-82-8, Methane, biological studies 1333-74-0, Hydrogen, biological studies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(effect of the **proton pump** inhibitor on breath hydrogen and methane concns.)
IT 9000-83-3
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(proton-translocating, inhibitors; effect of the **proton pump** inhibitor on breath hydrogen and methane concns.)

L9 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 2000:47023 CAPLUS
DN 132:88202
TI Oral bisphosphonates for inhibition of bone resorption
IN Daifotis, Anastasia G.; Yates, A. John; Santora, Arthur C., II
PA Merck and Co., Inc., USA
SO U.S., 21 pp., Cont.-in-part of Appl. No. PCT/US98/14796.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6015801	A	20000118	US 1998-134215	19980814
	WO 9904773	A2	19990204	WO 1998-US14796	19980717
	WO 9904773	A3	19990415		

W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HR, HU, ID, IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

	ZA 9806479	A	19990122	ZA 1998-6479	19980721
	GB 2336311	A1	19991020	GB 1998-19243	19980903
PRAI	US 1997-53351	P	19970722		
	US 1997-53535	P	19970723		
	WO 1998-US14796	A2	19980717		
	GB 1997-17590	A	19970820		
	GB 1997-17850	A	19970822		
	US 1998-60419	A	19980415		
	US 1998-134214	A	19980814		
	US 1998-134215	A	19980814		

RE.CNT 24
RE
(2) Anderson; US 4812304 1989 CAPLUS
(3) Anon; EP 0274158 1988 CAPLUS
(4) Anon; EP 0600834 A1 1994 CAPLUS
(5) Anon; WO 9508331 1995 CAPLUS
(6) Anon; WO 9528145 1995 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT
AB Disclosed are methods for inhibiting bone resorption in mammals using bisphosphonates, e.g., alendronate, cimadronate, clodronate, tiludronate, risedronate, pamidronate, etc., while minimizing the occurrence of or potential for adverse **gastrointestinal** effects. Pharmaceutical compns. and kits for caring out the therapeutic methods disclosed herein are also described. Also, a sequential administration of histamine H2 receptor blockers and/or **proton pump** inhibitors, such as cimetidine, famotidine, ranitidine, omprazole, and lansoprazole, with bisphosphonates can also minimize adverse **gastrointestinal** effects of bisphosphonates. For example, a biweekly administration of tablet or liq. formulations contg. 140 mg alendronate was useful and convenient method for treating osteoporosis in patients with minimal adverse **gastrointestinal** effects, particularly adverse esophageal effects. This method was useful for improving patients acceptance and compliance.
ST bisphosphonate bone resorption inhibition digestive tract; antihistamine **proton pump** inhibitor bisphosphonate adverse effect
IT Antihistamines
(H2, combination with; methods for inhibition of bone resorption by

oral bisphosphonates while minimizing adverse **gastrointestinal** effects)

IT Bone, disease
(Paget's; methods for inhibition of bone resorption by oral bisphosphonates while minimizing adverse **gastrointestinal** effects)

IT Periodontium
(disease; methods for inhibition of bone resorption by oral bisphosphonates while minimizing adverse **gastrointestinal** effects)

IT Bone, disease
(fracture; methods for inhibition of bone resorption by oral bisphosphonates while minimizing adverse **gastrointestinal** effects)

IT Neoplasm
(humoral hypercalcemia of malignancy; methods for inhibition of bone resorption by oral bisphosphonates while minimizing adverse **gastrointestinal** effects)

IT Gastric acid
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors, combination with; methods for inhibition of bone resorption by oral bisphosphonates while minimizing adverse **gastrointestinal** effects)

IT Drug delivery systems
(liqs., oral; methods for inhibition of bone resorption by oral bisphosphonates while minimizing adverse **gastrointestinal** effects)

IT Tooth
(loss; methods for inhibition of bone resorption by oral bisphosphonates while minimizing adverse **gastrointestinal** effects)

IT Bone, neoplasm
(metastasis; methods for inhibition of bone resorption by oral bisphosphonates while minimizing adverse **gastrointestinal** effects)

IT Multiple myeloma
(methods for inhibition of bone resorption by oral bisphosphonates while minimizing adverse **gastrointestinal** effects)

IT Drug delivery systems
(oral; methods for inhibition of bone resorption by oral bisphosphonates while minimizing adverse **gastrointestinal** effects)

IT Bone
(resorption, inhibitors; methods for inhibition of bone resorption by oral bisphosphonates while minimizing adverse **gastrointestinal** effects)

IT Drug delivery systems
(tablets; methods for inhibition of bone resorption by oral bisphosphonates while minimizing adverse **gastrointestinal** effects)

IT Osteoporosis
(therapeutic agents; methods for inhibition of bone resorption by oral bisphosphonates while minimizing adverse **gastrointestinal** effects)

IT 51481-61-9, Cimetidine 66357-35-5, Ranitidine 73590-58-6, Omeprazole 76824-35-6, Famotidine 76963-41-2, Nizatidine **103577-45-3**, Lansoprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination with; methods for inhibition of bone resorption by oral

bisphosphonates while minimizing adverse **gastrointestinal** effects)

IT 2809-21-4 10596-23-3 13598-36-2D, Phosphonic acid, alkylidinebis-derivs. 40391-99-9 66376-36-1, Alendronate 75755-07-6, Piridronic acid 89987-06-4, Tiludronate 105462-24-6 114084-78-5, Ibandronate 118072-93-8, Zolendronate 124351-85-5, Cimadronic acid 129318-43-0, Alendronate sodium
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods for inhibition of bone resorption by oral bisphosphonates while minimizing adverse **gastrointestinal** effects)

L9 ANSWER 10 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 1999:753096 CAPLUS
DN 132:452
TI Method for the treatment of gastroesophageal reflux disease using anti-gastrin immunogenic compn. immunization combination with H2 antagonist or **proton pump** inhibitor
IN Gevas, Philip C.; Grimes, Stephen; Karr, Stephen; Michaeli, Dov
PA Aphton Corporation, USA
SO PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9959612	A1	19991125	WO 1999-US10734	19990514
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9940798	A1	19991206	AU 1999-40798	19990514
	EP 1077716	A1	20010228	EP 1999-924252	19990514
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRAI	US 1998-85610	P	19980515		
	WO 1999-US10734	W	19990514		

RE.CNT 4
RE
(1) Budavari, S; The Merck Index (11th Ed) 1989, P1082
(2) Gevas; US 5023077 A 1991 CAPLUS
(3) Gevas; US 5468494 A 1995 CAPLUS
(4) Gevas; US 5609870 A 1997 CAPLUS
TI Method for the treatment of gastroesophageal reflux disease using anti-gastrin immunogenic compn. immunization combination with H2 antagonist or **proton pump** inhibitor
AB A method for the treatment of gastroesophageal reflux disease comprises a combination of active immunization with an anti-gastrin immunogenic compn. with an antagonist which blocks or inhibits the gastric acid pump activity; or alternatively administering purified anti-gastrin antibodies with a H2 antagonist or **proton pump** inhibitor of the gastric acid producing enzyme system.
ST gastrin immunogen combination gastroesophageal reflux disease; antibody gastrin combination gastroesophageal reflux disease; H2 antihistaminic gastrin immunogen gastroesophageal reflux disease; **proton pump** inhibitor gastrin immunogen gastroesophageal reflux disease
IT Antihistamines
(H2; anti-gastrin immunogenic compn. immunization combination with H2 antagonist or **proton pump** inhibitor for treatment of gastroesophageal reflux disease)
IT Drug delivery systems
Immunotherapy
Vaccines
(anti-gastrin immunogenic compn. immunization combination with H2 antagonist or **proton pump** inhibitor for treatment of gastroesophageal reflux disease)

IT Toxoids
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(diphtheria, immunogen conjugates; anti-gastrin immunogenic compn. immunization combination with H2 antagonist or **proton pump** inhibitor for treatment of gastroesophageal reflux disease)

IT Digestive tract
(gastroesophageal reflux; anti-gastrin immunogenic compn. immunization combination with H2 antagonist or **proton pump** inhibitor for treatment of gastroesophageal reflux disease)

IT Drugs
(**gastrointestinal**; anti-gastrin immunogenic compn. immunization combination with H2 antagonist or **proton pump** inhibitor for treatment of gastroesophageal reflux disease)

IT Antibodies
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(neutralizing, to gastrin; anti-gastrin immunogenic compn. immunization combination with H2 antagonist or **proton pump** inhibitor for treatment of gastroesophageal reflux disease)

IT 166444-99-1
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(anti-gastrin immunogenic compn. immunization combination with H2 antagonist or **proton pump** inhibitor for treatment of gastroesophageal reflux disease)

IT 250693-48-2, Gastrimmune
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(anti-gastrin immunogenic compn. immunization combination with H2 antagonist or **proton pump** inhibitor for treatment of gastroesophageal reflux disease)

IT 51481-61-9, Cimetidine 66357-35-5, Ranitidine 73590-58-6, Omeprazole 102625-70-7, Pantoprazole **103577-45-3**, Lansoprazole 110540-33-5, Fomatidine
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anti-gastrin immunogenic compn. immunization combination with H2 antagonist or **proton pump** inhibitor for treatment of gastroesophageal reflux disease)

IT 9002-76-0, Gastrin 60748-06-3, Gastrin 17
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(anti-gastrin immunogenic compn. immunization combination with H2 antagonist or **proton pump** inhibitor for treatment of gastroesophageal reflux disease)

IT 12408-02-5, Hydrogen ion, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**proton pump** inhibitors; anti-gastrin immunogenic compn. immunization combination with H2 antagonist or **proton pump** inhibitor for treatment of gastroesophageal reflux disease)

IT 135236-68-9
RL: PRP (Properties)
(unclaimed protein sequence; method for the treatment of

gastroesophageal reflux disease using anti-gastrin immunogenic compn. immunization combination with H2 antagonist or **proton pump** inhibitor)

IT 250719-85-8 251300-22-8 251300-23-9 251300-24-0 251300-25-1 251300-26-2 251300-27-3
RL: PRP (Properties)
(unclaimed sequence; method for the treatment of gastroesophageal reflux disease using anti-gastrin immunogenic compn. immunization combination with H2 antagonist or **proton pump** inhibitor)

L9 ANSWER 11 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 1999:741052 CAPLUS
DN 132:216852
TI Acid-independent gastroprotective effects of lansoprazole in experimental mucosal injury
AU Blandizzi, C.; Natale, G.; Gherardi, G.; Lazzeri, G.; Marveggio, C.; Colucci, R.; Carignani, D.; Del Tacca, M.
CS Department of Oncology (Division of Pharmacology and Chemotherapy) and Department of Human Morphology and Applied Biology, University of Pisa, Pisa, I-56126, Italy
SO Dig. Dis. Sci. (1999), 44(10), 2039-2050
CODEN: DDSCDJ; ISSN: 0163-2116
PB Kluwer Academic/Plenum Publishers
DT Journal
LA English
RE.CNT 49
RE
(1) Alison, M; J Pathol 1995, V175, P405 CAPLUS
(2) Blandizzi, C; Dig Dis Sci 1994, V39, P2109 CAPLUS
(3) Blandizzi, C; Dig Dis Sci 1997, V42, P1233 CAPLUS
(4) Blandizzi, C; Digestion 1995, V56, P220 CAPLUS
(5) Blum, R; Aliment Pharmacol Ther 1998, V12, P321 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT
AB The protective effects of the **proton pump** inhibitor lansoprazole on gastric mucosal damage induced by EtOH-HCl or hemorrhagic shock were investigated in the present study. The morphometric anal. of gastric histol. sections revealed that lansoprazole dose-dependently reduced mucosal injury evoked by EtOH-HCl (ED50 = 24.3 .mu.mol/kg) or hemorrhagic shock (ED50 = 38.9 .mu.mol/kg), these effects being assocd. with marked increments of Alcian blue recovery from gastric bound mucus (ED50 = 31.4 .mu.mol/kg and 27.6 .mu.mol/kg, resp.). In addn., lansoprazole inhibited gastric acid secretion from pylorus-ligated rats (ED50 = 9.8 .mu.mol/kg). Further expts., performed on rats with EtOH-HCl-induced gastric injury, indicated that the protective effects of lansoprazole were not modified by L-365,260, suramin, NG-nitro-L-Arg, or systemic ablation of capsaicin-sensitive sensory nerves, whereas they were partly blocked by indomethacin and fully prevented by N-ethyl-maleimide. In addn., lansoprazole did not modify somatostatin concns. in gastric mucosa. The present results provide evidence that lansoprazole prevents the necrotic damage of gastric mucosa induced by EtOH-HCl or hemorrhagic shock. According to the rank order of ED50 values, these effects appear to depend mainly on the enhancement of the gastric mucus barrier rather than on the redn. of acid secretion. It is also proposed that an increased prodn. of prostaglandins, as well as an increased availability of sulfhydryl compds. at level of gastric mucosa may account for the gastro-protective effects of lansoprazole.
IT Drugs
(**gastrointestinal**; acid-independent gastroprotective effects of lansoprazole in mucosal injury)
IT **103577-45-3**, Lansoprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(acid-independent gastroprotective effects of lansoprazole in mucosal injury)

L9 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 1999:722900 CAPLUS
DN 131:317790
TI Improved method for eradication of Helicobacter pylori
IN Borody, Thomas Julius
PA Australia
SO PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9956749	A1	19991111	WO 1999-AU321	19990430
	W: AU, CA, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9934006	A1	19991123	AU 1999-34006	19990430
	EP 1073436	A1	20010207	EP 1999-915381	19990430
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRAI	AU 1998-3253	A	19980430		
	WO 1999-AU321	W	19990430		

RE.CNT 9
RE
(1) Borody, T; WO 98/43667 A 1998 CAPLUS
(3) Gevaudan, M; Pathol Biol (Paris) 1991, V39(5), P436 CAPLUS
(4) Holton, J; J Antimicrob Chemother 1995, V35(4), P545 CAPLUS
(6) Pharmacia & Upjohn SPA; WO 97/02039 A 1997 CAPLUS
(7) Shafran, S; N Engl J Med 1996, V335(6), P377 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT
AB The invention provides methods for the treatment and/or prevention of recurrence of a **gastrointestinal** disorder assocd. with Helicobacter pylori in a patient requiring said treatment and/or prevention, which comprise administering to the patient a therapeutically effective amt. of a first antibiotic which is an ansamycin and a therapeutically effective amt. of at least a second antibiotic or antimicrobial agent. The invention also provides pharmaceutical compns. for use in the methods of the invention.
ST Helicobacter **proton pump** inhibitor antibiotic antibacterial
IT Digestive tract
(disease; treatment of Helicobacter pylori-assocd. **gastrointestinal** disorders and eradication of pathogen)
IT Antibacterial agents
Antibiotics
Helicobacter pylori
(treatment of Helicobacter pylori-assocd. **gastrointestinal** disorders and eradication of pathogen)
IT 9000-83-3, ATPase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(hydrogen ion-translocating; treatment of Helicobacter pylori-assocd. **gastrointestinal** disorders and eradication of pathogen)
IT 60-54-8, Tetracycline 7440-69-9D, Bismuth, compds. 26787-78-0, Amoxycillin 72559-06-9, Rifabutin 73590-58-6, Omeprazole 81103-11-9, Clarithromycin 102625-70-7, Pantoprazole **103577-45-3**, Lansoprazole 117976-89-3, Rabeprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of Helicobacter pylori-assocd. **gastrointestinal**

disorders and eradication of pathogen)

L9 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 1999:505007 CAPLUS
DN 131:153371
TI Relative efficacies of gastric **proton pump** inhibitors. Their clinical and pharmacological basis
AU Kromer, Wolfgang; Horbach, Silke; Luhmann, Reinhold
CS Department Pharmacology, Byk Gulden, Konstanz, D-78467, Germany
SO Pharmacology (1999), 59(2), 57-77
CODEN: PHMGBN; ISSN: 0031-7012
PB S. Karger AG
DT Journal; General Review
LA English
RE.CNT 164
RE
(3) Avner, D; Aliment Pharmacol Ther 1995, V9, P521 CAPLUS
(5) Balaban, D; Am J Gastroenterol 1997, V92, P79 CAPLUS
(18) Blum, R; Aliment Pharmacol Ther 1998, V12, P321 CAPLUS
(19) Blum, R; Clin Ther 1997, V19, P1013 CAPLUS
(22) Bruley des Varannes, S; Aliment Pharmacol Ther 1994, V8, P309 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT
TI Relative efficacies of gastric **proton pump** inhibitors. Their clinical and pharmacological basis
AB The present review will verify by intra-study rank orders, and their comparison between studies, that the different gastric **proton pump** inhibitors (PPIs) display similar dose-response relationships with similar potencies and efficacies on a milligram basis, i.e., at the same milligram doses. This is in line with their basic pharmacol. which suggests that, primarily, the serum AUCs of the free pro-drugs and their chem. activation half lives at pH 1 relative to their serum elimination half lives det. the efficacies of PPIs. According to the literature, these drug characteristics are similar for all PPIs. Although PPIs have been introduced into the therapy of acute peptic ulcer disease at different daily, oral doses of 20 mg (omeprazole and rabeprazole), 30 mg (lansoprazole) and 40 mg (pantoprazole), the data suggest that the optimal dose of lansoprazole, omeprazole, and pantoprazole, with respect to the acute treatment of peptic ulcers and moderate to severe gastroesophageal reflux disease (GERD), is about 30-40 mg daily. The data base of rabeprazole appears to be too small at present to make any definite statement. Lower daily doses of the PPIs of about 15-20 mg are sufficient in less severe cases of GERD and in maintenance therapy. It appears that different dose recommendations were based on different strategies to balance optimal drug dosage and safety, rather than on real differences in milligram-related efficacies. This article is reviewed by 165 refs.
IT Antiulcer agents
(**gastrointestinal**; relative efficacies of gastric **proton pump** inhibitors)
IT Stomach
(relative efficacies of gastric **proton pump** inhibitors)
IT 73590-58-6, Omeprazole 102625-70-7, Pantoprazole **103577-45-3**, Lansoprazole 117976-89-3, Rabeprazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(relative efficacies of gastric **proton pump** inhibitors)

L9 ANSWER 14 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 1999:409248 CAPLUS
DN 131:39720
TI Proteolytic enzymes as bactericides against Helicobacter for treatment of related **gastrointestinal** diseases
IN Kakutani, Toru; Okubo, Yuji; Fujii, Takeshi; Nakai, Takanao; Ishii, Kiyoto; Hosoda, Tomonori
PA Kanegafuchi Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11171791	A2	19990629	JP 1998-40514	19980223
PRAI	JP 1997-274186		19971007		

TI Proteolytic enzymes as bactericides against Helicobacter for treatment of related **gastrointestinal** diseases
AB Proteolytic enzymes from microorganism, plant, and animals (including pronase, trypsin, .alpha.-chymotrypsin, and elastase) as bactericides against Helicobacter (e.g. H. pylori) for treatment of related **gastrointestinal** diseases e.g. gastritis, ulcer, etc. The proteolytic enzymes can combine with **proton pump** inhibitors, H2 antihistaminics, antimicrobial agents, spasmolytics, and surfactants in antiulcer formulations.
ST proteolytic enzyme bactericide Helicobacter **gastrointestinal** disease; antiulcer proteolytic enzyme bactericide Helicobacter
IT Antihistamines
(H2; proteolytic enzymes as bactericides against Helicobacter for treatment of related **gastrointestinal** diseases)
IT Digestive tract
(disease; proteolytic enzymes as bactericides against Helicobacter for treatment of related **gastrointestinal** diseases)
IT Stomach, disease
(gastritis; proteolytic enzymes as bactericides against Helicobacter for treatment of related **gastrointestinal** diseases)
IT Anti-infective agents
(medical; proteolytic enzymes as bactericides against Helicobacter for treatment of related **gastrointestinal** diseases)
IT Antibacterial agents
Antiulcer agents
Drug interactions
Helicobacter
Helicobacter pylori
Surfactants
(proteolytic enzymes as bactericides against Helicobacter for treatment of related **gastrointestinal** diseases)
IT Muscle relaxants
(spasmolytics; proteolytic enzymes as bactericides against Helicobacter for treatment of related **gastrointestinal** diseases)
IT 149-64-4, Butylscopolamine bromide 9001-92-7, Proteolytic enzyme 9002-07-7, Trypsin 9004-06-2, Elastase 9004-07-3, .alpha.-Chymotrypsin 9036-06-0, Pronase 26787-78-0, Amoxicillin 66357-59-3, Ranitidine hydrochloride 81103-11-9, Clarithromycin **103577-45-3**, Lansoprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(proteolytic enzymes as bactericides against Helicobacter for treatment of related **gastrointestinal** diseases)

IT 12408-02-5, Hydrogen ion, biological studies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(pump inhibitors; proteolytic enzymes as bactericides against Helicobacter for treatment of related **gastrointestinal** diseases)

L9 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 1999:172610 CAPLUS
DN 130:213643
TI Combined preparations for treating upper **gastrointestinal** tract distress
IN Mitra, Sekhar; Desai, Kishorkumar Jivanlal
PA The Procter & Gamble Company, USA
SO PCT Int. Appl., 13 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9910000	A1	19990304	WO 1998-IB1205	19980806
	W: AU, CA, CN, JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9883544	A1	19990316	AU 1998-83544	19980806
	JP 2001513570	T2	20010904	JP 2000-507390	19980806
PRAI	US 1997-917993	A	19970825		
	WO 1998-IB1205	W	19980806		

RE.CNT 4
RE
(1) Astra; WO 9624375 A 1996 CAPLUS
(2) Astra; WO 9725066 A 1997 CAPLUS
(3) Merck & Co; EP 0480691 A 1992 CAPLUS
(4) Procter & Gamble; WO 9822117 A 1998 CAPLUS
TI Combined preparations for treating upper **gastrointestinal** tract distress
AB Multilayer combined prepns. for oral administration to be used for disorders of the upper **gastrointestinal** tract, such as heartburn, indigestion or H. pylori infections is disclosed. The preferred form is a tablet which releases a bismuth compd. in the stomach and a **proton pump** inhibiting compd. into the intestine. This is achieved by making an enteric coated core contg. the **proton pump** inhibitor with an outer layer contg. the bismuth compd. A multilayered tablet contained bismuth subsalicylate cake 262.5, calcium carbonate 67.5, mannitol 67.5, color 0.70, povidone 13.50, magnesium stearate 5.40, microcryst. cellulose 213.4, sodium starch glycolate 40.3, Polysorbate 80 3.4, colloidal silicon dioxide 0.7 in the core layer, microcryst. cellulose 200.00 in the center layer, omeprazole 10, and microcryst. cellulose in the final layer.
ST **proton pump** inhibitor bismuth salt stomach; multilayer pharmaceutical tablet bismuth subsalicylate omeprazole
IT Antiulcer agents
Capsules (drug delivery systems)
Gastrointestinal tract
(combined prepns. for treating upper **gastrointestinal** tract distress)
IT Tablets (drug delivery systems)
(enteric-coated; combined prepns. for treating upper **gastrointestinal** tract distress)
IT Gastric acid
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; combined prepns. for treating upper **gastrointestinal** tract distress)
IT Tablets (drug delivery systems)
(multilayered; combined prepns. for treating upper **gastrointestinal** tract distress)

IT 99-26-3, Bismuth subgallate 813-93-4, Bismuth citrate 1304-85-4, Bismuth subnitrate 1344-85-0, Bismuth aluminate 5892-10-4, Bismuth subcarbonate 6591-56-6, Bismuth tartrate 14882-18-9, Bismuth subsalicylate 57644-54-9, Tripotassium dicitratobismuthate 73590-58-6, Omeprazole **103577-45-3**, Lansoprazole 117976-89-3, Rabeprazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combined prepns. for treating upper **gastrointestinal** tract distress)

L9 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 1999:90546 CAPLUS
DN 130:119588
TI **Proton pump** inhibitor in therapeutic combination with antibacterial substances
IN Tuch, Klaus
PA BYK Gulden Lomberg Chemische Fabrik G.m.b.H., Germany
SO PCT Int. Appl., 12 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9904816	A1	19990204	WO 1998-EP4553	19980721
	W: AL, AU, BA, BG, BR, CA, CN, CZ, EE, GE, HR, HU, ID, IL, JP, KR, LT, LV, MK, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, US, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9890671	A1	19990216	AU 1998-90671	19980721
	EP 1003554	A1	20000531	EP 1998-942585	19980721
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRAI	EP 1997-112795		19970725		
	WO 1998-EP4553		19980721		

RE.CNT 8
RE
(1) BYK Gulden Lomberg Chem Fab; WO 9702021 A 1997 CAPLUS
(2) Greco, S; Annals of Pharmacotherapy 1997, V31(12), P1548 MEDLINE
(3) Jonkers, D; J Antimicrob Chemother 1996, V37(1), P145 CAPLUS
(4) Kalas, D; ORV Hetil 1996, V137(36), P1969 MEDLINE
(8) Takeshi, A; JP 09188624 A 1997 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT
TI **Proton pump** inhibitor in therapeutic combination with antibacterial substances
AB The invention relates to the use of **proton pump** inhibitors as combination therapeutics in the treatment of bacterial diseases which do not affect the **gastrointestinal** tract using antibacterially active compds.
ST **proton pump** inhibitor antibacterial combination
IT Gastritis
(atrophic; **proton pump** inhibitor in therapeutic combination with antibacterial substances)
IT Infection
(bone infection; **proton pump** inhibitor in therapeutic combination with antibacterial substances)
IT Infection
(central nervous system; **proton pump** inhibitor in therapeutic combination with antibacterial substances)
IT Mucous membrane
(disease, infection; **proton pump** inhibitor in therapeutic combination with antibacterial substances)
IT Ureter
(efferent, infection; **proton pump** inhibitor in therapeutic combination with antibacterial substances)
IT Bone diseases
Central nervous system diseases
Ear diseases
Joint diseases

Kidney diseases
Nose diseases
Pharynx
Reproductive organ (animal)
Soft tissue
(infection; **proton pump** inhibitor in therapeutic combination with antibacterial substances)

IT Infection
(kidney; **proton pump** inhibitor in therapeutic combination with antibacterial substances)

IT Diseases (animal)
(mucous membrane, infection; **proton pump** inhibitor in therapeutic combination with antibacterial substances)

IT Kidney
(pelvis, infection; **proton pump** inhibitor in therapeutic combination with antibacterial substances)

IT Antibacterial agents
Antibiotics
Drug interactions
Gastrointestinal tract
Respiratory tract infection
Skin infection
(**proton pump** inhibitor in therapeutic combination with antibacterial substances)

IT 443-48-1, Metronidazole 81103-11-9, Clarithromycin
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**proton pump** inhibitor in therapeutic combination with antibacterial substances)

IT 73590-58-6, Omeprazole 102625-70-7, Pantoprazole **103577-45-3**, Lansoprazole 104340-86-5, Leminoprazole 117976-89-3, Rabeprazole 156601-79-5, Nepaprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**proton pump** inhibitor in therapeutic combination with antibacterial substances)

IT 9000-83-3, ATPase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**proton pump** inhibitor in therapeutic combination with antibacterial substances)

L9 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 1998:385503 CAPLUS
DN 129:49664
TI Compositions and methods for the treatment of **gastrointestinal** disorders comprising **proton pump** inhibitors and antacid rafting agent
IN Mitra, Sekhar
PA Procter & Gamble Company, USA
SO PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9823272	A1	19980604	WO 1997-US21152	19971119
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9854467	A1	19980622	AU 1998-54467	19971119
	JP 2001509791	T2	20010724	JP 1998-524726	19971119
PRAI	US 1996-753661	A	19961127		
	WO 1997-US21152	W	19971119		

TI Compositions and methods for the treatment of **gastrointestinal** disorders comprising **proton pump** inhibitors and antacid rafting agent
AB Methods and compns. for treating one or more **gastrointestinal** disorders comprising a therapeutically effective amt. of a **proton pump** inhibitor and a therapeutically effective amt. of an antacid rafting agent (a combination of .gtoreq.1 antacid agents and .gtoreq.1 alginate compd. wherein, after ingestion, the antacid floats on the stomach contents). A 50 yr old man suffering from chronic active gastritis and peptic ulcer disease was orally administered .apprx.80 mg of lansoprazole daily and 2 teaspoonfuls of Gaviscon in four equal daily doses (which delivers .apprx.1016 mg of aluminum hydroxide and 950 mg of magnesium carbonate/day) for 56 days. The patient was symptom-free and showed no evidence of **gastrointestinal** disease after the treatment period.
ST **gastrointestinal** disorder **proton pump** inhibitor antacid
IT Gastritis
(chronic active; compns. and methods for treatment of **gastrointestinal** disorders comprising **proton pump** inhibitors and antacid rafting agent)
IT Antacids
Digestive system diseases
Dyspepsia
Esophageal reflux
(compns. and methods for treatment of **gastrointestinal** disorders comprising **proton pump** inhibitors and antacid rafting agent)
IT Esophageal diseases
(esophagitis; compns. and methods for treatment of **gastrointestinal** disorders comprising **proton pump** inhibitors and antacid rafting agent)

IT Digestive system diseases
(pyrosis; compns. and methods for treatment of **gastrointestinal** disorders comprising **proton pump** inhibitors and antacid rafting agent)

IT 546-93-0, Magnesiumcarbonate 9005-32-7, Alginic acid 21645-51-2, Aluminum hydroxide, biological studies 73590-58-6, Omeprazole 102625-70-7, Pantoprazole **103577-45-3**, Lansoprazole 117976-89-3, Pariprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. and methods for treatment of **gastrointestinal** disorders comprising **proton pump** inhibitors and antacid rafting agent)

IT 9000-83-3, Atpase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**proton pump** inhibitors; compns. and methods for treatment of **gastrointestinal** disorders comprising **proton pump** inhibitors and antacid rafting agent)

L9 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 1998:273012 CAPLUS
DN 129:23215
TI Lansoprazole triple therapy for Helicobacter pylori-is 5 days enough?
AU O'connor, H. J.; Mcloughlin, R.; Kelly, S.; Laundon, J.; Cunnane, K.
CS Department of Medicine, General Hospital, Tullamore, Ire.
SO Aliment. Pharmacol. Ther. (1998), 12(3), 273-276
CODEN: APTHEN; ISSN: 0269-2813
PB Blackwell Science Ltd.
DT Journal
LA English
AB Seven-day **proton pump** inhibitor triple therapy is currently the treatment of choice for Helicobacter pylori infection. It is unclear whether triple therapy for less than 7 days might preserve efficacy while at the same time improving patient acceptability and compliance. To evaluate the Helicobactericidal efficacy, ulcer healing capacity and patient acceptability of a 5-day lansoprazole-based triple therapy regimen. Sixty-nine consecutive patients with H. pylori-pos. peptic ulcer received lansoprazole 30 mg twice daily in combination with metronidazole 400 mg twice daily and clarithromycin 250 mg twice daily for 5 days. Ulcer healing medication was not continued after the 5-day regimen. H. pylori status was assessed before and at least 4 wk after therapy by rapid urease test and histol. Adverse events and compliance were assessed by direct questioning. All 69 patients attended for repeat endoscopy and 63 were H. pylori-neg. after therapy giving a cure rate of 91% (95% Cl: 85-98%). Of the 59 patients with active ulcers, 58 were healed at repeat endoscopy giving an ulcer healing rate of 98% (95% Cl: 92-100%). All patients fully complied with therapy and mild adverse events, mainly **gastrointestinal**, were reported by 11 patients (16%). Five-day lansoprazole triple therapy is an effective regimen for H. pylori infection which combines a high cure rate and ulcer healing efficacy with the advantages of excellent patient acceptability and compliance.
IT 443-48-1, Metronidazole 81103-11-9, Clarithromycin **103577-45-3**, Lansoprazole
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lansoprazole triple therapy for Helicobacter pylori in humans)

L9 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 1998:63086 CAPLUS
DN 128:188502
TI Efficacy of lansoprazole in the short- and long-term treatment of gastroesophageal reflux disease: a systematic overview
AU Manzionna, G.; Pace, F.; Porro, G. Bianchi
CS Divisione Gastroenterologia, Ospedale Azienda, Polo Universitario 'L. Sacco', Milan, Italy
SO Clin. Drug Invest. (1997), 14(6), 450-456
CODEN: CDINFR; ISSN: 1173-2563
PB Adis International Ltd.
DT Journal
LA English
AB This work reports a retrospective overview of clin. studies, published in the English-language literature, regarding the treatment of reflux esophagitis with the newly developed **proton pump** inhibitor (PPI) lansoprazole, compared with other acid-suppressant drugs. Eleven studies were identified in the literature and included in the overview; of these, four studies compared lansoprazole with ranitidine, one with famotidine and four with the PPI omeprazole. Two studies focused exclusively on the comparison of different dosages of lansoprazole. This overview showed that, with regard to healing rate and symptomatic relief, lansoprazole was superior to H2-receptor antagonists. Regarding healing rates and symptom response, lansoprazole was equal to omeprazole. The scarce data concerning long-term treatment indicated similar efficacy for the two PPIs. The tolerability of lansoprazole did not appear to be different from that of H2-receptor antagonists and omeprazole.
ST lansoprazole reflux esophagitis; **gastrointestinal** reflux disease lansoprazole
IT **103577-45-3**, Lansoprazole
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gastroesophageal reflux disease of humans treatment by)

L9 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 1997:593660 CAPLUS
DN 127:242703
TI Lansoprazole. An update of its pharmacological properties and clinical efficacy in the management of acid-related disorders
AU Langtry, Heather D.; Wilde, Michelle I.
CS Adis International Limited, Auckland, N. Z.
SO Drugs (1997), 54(3), 473-500
CODEN: DRUGAY; ISSN: 0012-6667
PB Adis
DT Journal; General Review
LA English
AB A review with 205 refs. Lansoprazole is a **proton pump** inhibitor that reduces gastric acid secretion. It has proved effective in combination regimens for the eradication of Helicobacter pylori and as monotherapy to heal and relieve symptoms of gastric or duodenal ulcers and gastro-esophageal reflux. After initial healing, it may be used to prevent recurrence of esophageal erosions or peptic ulcers in patients in whom H. pylori is not the major cause of ulceration and to reduce basal acid output in patients with Zollinger-Ellison syndrome. Usual dosages are 15 to 60 mg/day, although dosages of .ltoreq.180 mg/day have been used in patients with hypersecretory states. In patients with duodenal or gastric ulcer, short term lansoprazole monotherapy was similar to omeprazole and superior to histamine H2 receptor antagonists in achieving healing rates >90%. Lansoprazole was as effective a component of H. pylori eradication regimens as omeprazole, tripotassium dicitrato bismuthate (colloidal bismuth subcitrate) or ranitidine. Lansoprazole was superior to ranitidine in symptom relief and healing of gastro-esophageal reflux disease and tended to relieve symptoms more rapidly than omeprazole, although initial healing was similar. As maintenance treatment, lansoprazole was similar to omeprazole and superior to ranitidine in relieving symptoms and preventing relapse. Lansoprazole was also superior to ranitidine in healing and relieving symptoms of esophageal erosions assocd. with Barrett's esophagus; healing was maintained for a mean of 2.9 yr in .gtoreq.70% of patients. Lansoprazole was also superior to ranitidine in prophylaxis of redilatation of esophageal strictures. After .gtoreq.4 yr of use in patients with Zollinger-Ellison syndrome, lansoprazole 60 to 180 mg/day effectively controlled basal acid output. Dosages may be reduced in some patients once healing and symptom relief has been achieved. Preliminary studies of lansoprazole in patients at risk of aspiration pneumonia or stress ulcers show promise. Although studies show lansoprazole is potentially effective in treating **gastrointestinal** bleeding, future studies should assess patients' H. pylori status. Lansoprazole has been well tolerated in clin. trials, with headache, diarrhea, dizziness and nausea appearing to be the most common adverse effects. Tolerability of lansoprazole does not deteriorate with age and the drug is well tolerated in long term use (.ltoreq.4 yr) in patients with Zollinger-Ellison syndrome or reflux disease. Thus, lansoprazole is an important alternative to omeprazole and H2 receptor antagonists in acid-related disorders. In addn. to its efficacy in healing or maintenance treatment, it may provide more effective symptom relief than other comparator agents.
IT **103577-45-3**, Lansoprazole
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(update of lansoprazole pharmacol. properties and clin. efficacy in the management of acid-related disorders)

L9 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 1997:558828 CAPLUS
DN 127:166786
TI Oral pharmaceutical dosage forms comprising a **proton pump** inhibitor and a NSAID
IN Depui, Helene; Lundberg, Per Johan
PA Astra Aktiebolag, Swed.; Depui, Helene; Lundberg, Per Johan
SO PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9725064	A1	19970717	WO 1996-SE1735	19961220
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2213987	AA	19970717	CA 1996-2213987	19961220
	AU 9713239	A1	19970801	AU 1997-13239	19961220
	AU 712571	B2	19991111		
	BR 9607476	A	19971223	BR 1996-7476	19961220
	EP 814839	A1	19980107	EP 1996-944724	19961220
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	CN 1183048	A	19980527	CN 1996-193595	19961220
	JP 11501948	T2	19990216	JP 1996-525129	19961220
	ZA 9610936	A	19970708	ZA 1996-10936	19961230
	NO 9704069	A	19971017	NO 1997-4069	19970904
PRAI	SE 1996-70	A	19960108		
	WO 1996-SE1735	W	19961220		

TI Oral pharmaceutical dosage forms comprising a **proton pump** inhibitor and a NSAID
AB An oral pharmaceutical dosage form comprising an acid susceptible **proton pump** inhibitor and 1 or more NSAIDs in a fixed formulation, wherein the **proton pump** inhibitor is protected by an enteric coating layer. The fixed formulation is in the form of an enteric coating layered tablet, a capsule or a multiple unit tableted dosage form. The new fixed formulation is esp. useful in the treatment of **gastrointestinal** side-effects assocd. with NSAID treatment. Enteric-coated pellets of lansoprazole were prepd. by using std. excipients. Tablets contained lansoprazole 94, microcryst. cellulose 181.8, crosslinked PVP 18.2, naproxen 250, PEG 200, sodium aluminum silicate 50, L-arginine 190, and EtOH 280 mg/tablet.
ST tablet antiinflammatory nonsteroidal **proton pump** inhibitor
IT Pellets (drug delivery systems)
Tablets (drug delivery systems)
(enteric-coated; oral pharmaceuticals contg. **proton pump** inhibitor and NSAID)
IT Capsules (drug delivery systems)
Gastrointestinal diseases
Nonsteroidal anti-inflammatory drugs
(oral pharmaceuticals contg. **proton pump** inhibitor and NSAID)

IT 15307-86-5, Diclofenac 15687-27-1, Ibuprofen 22204-53-1, Naproxen
36322-90-4, Piroxicam 73590-58-6, Omeprazole 95382-33-5 102625-70-7,
Pantoprazole **103577-45-3**, Lansoprazole 161973-10-0
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oral pharmaceuticals contg. **proton pump** inhibitor
and NSAID)

L9 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 1996:532133 CAPLUS
DN 125:185465
TI Long-term treatment with lansoprazole for patients with Zollinger-Ellison syndrome
AU Hirschowitz, B. I.; Mohnen, J.; Shaw, S.
CS Department Medicine, University Alabama, Birmingham, AL, 35294, USA
SO Aliment. Pharmacol. Ther. (1996), 10(4), 507-522
CODEN: APTHEN; ISSN: 0269-2813
DT Journal
LA English
AB Normalization of gastric secretion and cure of assocd. upper **gastrointestinal** lesions by resection of gastrinoma is possible in .apprxeq. 20% of patients with Zollinger-Ellison syndrome, leaving .apprxeq. 80% dependent on medical treatment with **proton pump** inhibitors for acid suppression. Lansoprazole was given for 3-48 mo (median 28 mo) to 26 Zollinger-Ellison syndrome patients with peptic ulcer manifestations in all and esophagitis in 13. Starting with 60 mg/day, the dose was individualized to lower basal acid output to less than 5 mmol/h for those with intact stomachs and less than 1 mmol/h in those who had prior gastrectomy or with esophagitis. The patients were studied every 3 mo for 1 yr and then every 6 mo with gastric anal. (basal and maximal acid and pepsin output) and endoscopy with biopsy for enterochromaffin-like (ECL) cells. Lansoprazole inhibited basal acid output by 95%, pepsin output by 65% and remained effective at the initial mean (66.+-.4.3 mg/day) or smaller doses (56.+-.12 mg/day) at 48 mo. Mucosal lesions healed and symptoms (ulcer-type pain, diarrhea, heartburn, wt. loss) resolved rapidly, usually within a few weeks. Serum gastrin and ECL cell populations, which were elevated before treatment, remained statistically unchanged but one of the three multiple endocrine neoplasia I (MEN-I) patients developed a small carcinoid. Of the three patients with metastatic gastrinoma at diagnosis one has died and one has progressed, while the third has had stable liver metastases for 26 yr. Ulcer-type relapses occurred in three of the five post-gastrectomy patients, one with fatal jejunal ulcer perforation despite adequate acid suppression. No biochem. or clin. adverse events due to lansoprazole were encountered. Lansoprazole effectively inhibits acid and pepsin secretion in Zollinger-Ellison syndrome patients without any demonstrated side-effects. Despite strict acid control, post-gastrectomy Zollinger-Ellison syndrome patients were more liable to ulcer relapse, while oesophagitis was not a marker for therapeutic difficulty.
ST lansoprazole antiulcer Zollinger Ellison syndrome; **proton pump** inhibitor Zollinger Ellison syndrome
IT **103577-45-3**, Lansoprazole
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(long-term treatment with lansoprazole for humans with Zollinger-Ellison syndrome)

L9 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 1991:74645 CAPLUS
DN 114:74645
TI Metabolic fate of AG-1749, a new **proton pump** inhibitor, in rats, mice, and dogs
AU Miwa, Kiyoshi; Mitani, Masayoshi; Tsukamoto, Takeshi; Yoshida, Kiyoshi; Kobayashi, Takuo; Kimura, Tomokazu; Shimomura, Hatsushi; Tanayama, Shigeharu
CS Drug-Saf. Res. Lab., Takeda Chem. Ind., Ltd., Japan
SO Yakuri to Chiryo (1990), 18(9), 3413-35
CODEN: YACHDS; ISSN: 0386-3603
DT Journal
LA Japanese
TI Metabolic fate of AG-1749, a new **proton pump** inhibitor, in rats, mice, and dogs
AB The absorption, tissue distribution, metab., and elimination of [14C]AG-1749 following oral administration were studied in rats, mice, and dogs. The results show that the absorption rate in rats, mice and dogs was 37, 28, and 63%, resp., and that the bioavailability was 4, 4, and 23%, resp. AG-1749 distributed preferentially in **gastrointestinal** tract and liver. Ten major metabolites of AG-1749 were detd. in blood plasma, bile, and urine. The unchanged compd. and metabolites were able to transfer to fetus and milk. The metabolites were mainly excreted in feces, suggesting the role of enterohepatic circulation. In addn., AG-1749 induced drug-metabolizing enzymes in liver after oral administration.
IT **103577-45-3**, AG 1749
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(pharmacokinetics of, after oral administration)

L9 ANSWER 25 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 1989:147591 CAPLUS
DN 110:147591
TI Antisecretory and antiulcer activities of a novel **proton pump** inhibitor AG-1749 in dogs and rats
AU Satoh, Hiroshi; Inatomi, Nobuhiro; Nagaya, Hideaki; Inada, Ikuko; Nohara, Akira; Nakamura, Nobuto; Maki, Yoshitaka
CS Cent. Res. Div., Takeda Chem. Ind., Ltd., Osaka, 532, Japan
SO J. Pharmacol. Exp. Ther. (1989), 248(2), 806-15
CODEN: JPETAB; ISSN: 0022-3565
DT Journal
LA English
TI Antisecretory and antiulcer activities of a novel **proton pump** inhibitor AG-1749 in dogs and rats
AB The antisecretory and antiulcer activities of 2[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazole (AG-1749) were investigated in dogs and rats. AG-1749 inhibited both the (H+ + K+)-ATPase activity in canine gastric microsomes and dibutyryl cAMP-stimulated acid formation in isolated canine parietal cells and suppressed the acid secretion stimulated by histamine, pentagastrin, bethanechol, or a peptone meal in Heidenhain pouch dogs; the ID50 values were 0.2-0.7 mg/kg, orally. AG-1749 inhibited both the histamine-stimulated and the basal acid secretion in pylorus-ligated rats and prevented water immersion stress or aspirin-induced gastric lesions and mepirizole or cysteamine-induced duodenal ulcers in rats; the ID50 values were 0.3-3.6 mg/kg, orally or intraduodenally. Furthermore, AG-1749 prevented gastric lesions induced by EtOH or acidified aspirin, and accelerated the healing of HOAc-induced gastric or duodenal ulcers in rats. The inhibitory potency of AG-1749 in dogs was much the same as that of omeprazole and about half that of ranitidine. However, it was 2-10 times more potent than omeprazole and 4-34 times more potent than ranitidine in rats. AG-1749 exerts prominent antiulcer activities mainly by suppressing acid secretion via an inhibition of a **proton pump** in gastric parietal cells and partly by protecting the **gastrointestinal** mucosa against various ulcerative stimuli.
IT **103577-45-3**, AG 1749
RL: BIOL (Biological study)
(stomach acid secretion and ulcer inhibition by, mechanism of)

L20 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2001 ACS
AN 2000:861483 CAPLUS
DN 134:25340
TI New use of compounds as antibacterial agents
IN Eek, Arne; Raud, Johan
PA Astrazeneca AB, Swed.
SO PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000072838	A1	20001207	WO 2000-SE1071	20000525

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI SE 1999-2027 A 19990601
SE 1999-4704 A 19991221

AB The present invention discloses a new use of NO-releasing **NSAIDs**, esp. NO-releasing **NSAIDs** of formula (I), or a pharmaceutically acceptable salt or enantiomer thereof, for the manuf. of a medicament for the treatment of bacterial infections, esp. caused or mediated by Helicobacter pylori. Disclosed is also the new use of a NO-releasing **NSAID** in combination with an acid susceptible **proton pump** inhibitor for the treatment of bacterial infections.

RE.CNT 12
RE
(1) Corlay, S; WO 9404484 A1 1994 CAPLUS
(2) Davies, N; Pharmacol Ther 1997, V11, P69 CAPLUS
(3) Duke University Medical Center; WO 9967210 A1 1999 CAPLUS
(4) Entremed Inc; WO 9509612 A1 1995 CAPLUS
(5) Fiorucci, S; Aliment Pharmacol Ther 1999, V13, P421 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2001 ACS
AN 2000:476597 CAPLUS
DN 133:171627
TI Novel therapeutic approaches to gastric and duodenal ulcers: an update
AU Dajani, Esam Z.; Klamut, Michael J.
CS Long Grove, Illinois and Gastroenterology Section, Loyola University Medical Center, International Drug Development Consultants Corporation, Chicago, IL, USA
SO Expert Opin. Invest. Drugs (2000), 9(7), 1537-1544
CODEN: EOIDER; ISSN: 1354-3784
PB Ashley Publications Ltd.
DT Journal; General Review
LA English
AB A review with 53 refs. Over the last 25 yr, a remarkable revolution in the pathophysiol. and treatment of gastric and duodenal ulcers has occurred. Effective therapies were developed not only to heal ulcers, but also to cure most patients. The two principal causes for gastric and

duodenal ulcers are either infection with Helicobacter pylori or the use of non-steroidal anti-inflammatory drugs (**NSAIDs**). With H. pylori eradication, gastric and duodenal ulcers are rapidly becoming historical diseases. This communication reviews the salient pharmacol. of the novel anti-ulcer drugs currently in development, with particular emphasis on the treatment of gastric and duodenal ulcers. Intense research is currently focused on the development of **proton pump** inhibitors primarily for the treatment and prevention of gastroesophageal reflux disease. The older **proton pump** inhibitors, omeprazole and **lansoprazole**, are effective in healing gastric and duodenal ulcers. Furthermore, both drugs are effective in eradicating H. pylori when given with various antibiotics. Pantoprazole, rabeprazole and esomeprazole are new **proton pump** inhibitors, which appear to have comparable therapeutic profiles with omeprazole and **lansoprazole**. Rebamipide is a new mucosal protective drug, which is effective in healing gastric ulcers. Polaprezinc and nocloprost are also mucosal protective drugs, which are in clin. development. However, none of these three cytoprotective drugs have been evaluated for their efficacy in eradicating H. pylori when given in combination with antibiotics. Likewise, no published literature exists on the use of these drugs for preventing **NSAID**-induced ulcers. With the rapid eradication of H. pylori currently happening in the developed world, the therapeutic challenge is now directed toward preventing **NSAID**-assocd. ulcer. Significant redn. of **NSAID**-induced ulcers is achieved by using continuous prophylactic anti-ulcer therapy (misoprostol or omeprazole) or by using **NSAIDs** possessing selective COX-2 inhibitory activity. However, outcome clin. studies are needed to compare the adjuvant anti-ulcer therapies given with COX-1 inhibitors vs. the selective COX-2 inhibitors given alone.

RE.CNT 53
RE
(4) Arakawa, T; Dig Dis Sci 1990, V35, P559 CAPLUS
(6) Barclay, M; Aliment Pharmacol Ther 1999, V13, P1215 CAPLUS
(9) Chung, S; J Pharm Pharmacol 1999, V51, P929 CAPLUS
(14) Dekkers, C; Aliment Pharmacol Ther 1999, V13, P179 CAPLUS
(24) Hawkey, C; N Engl J Med 1998, V338, P727 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2001 ACS
AN 2000:16044 CAPLUS
DN 132:58610
TI Use of **proton-pump** inhibitors in complicated ulcer disease and upper gastrointestinal tract bleeding
AU Howden, Colin W.
CS Division of Gastroenterology and Hepatology, Northwestern University Medical School, Chicago, IL, 60611, USA
SO Am. J. Health-Syst. Pharm. (1999), 56(Suppl. 4), S5-S11
CODEN: AHSPEK; ISSN: 1079-2082
PB American Society of Health-System Pharmacists
DT Journal; General Review
LA English
AB A review with 59 refs. The use of **proton-pump** inhibitors in the management of complicated peptic ulcer disease and upper gastrointestinal bleeding is described. Treatment of peptic ulcers in patients who are Helicobacter pylori pos. should include antimicrobial therapy to eradicate the infection; based on considerations of primary antimicrobial resistance and safety, one recommended regimen is the combination of a **proton-pump** inhibitor (**lansoprazole** 30 mg or omeprazole 20 mg), clarithromycin 500 mg,

and amoxicillin 1 g, each twice daily for 14 days. The proportion of H. pylori-neg. ulcers has increased in the United States, now accounting for 39% of patients with ulcers who report no intake of nonsteroidal anti-inflammatory drugs (**NSAIDs**). Compared with H. pylori-pos. ulcers, H. pylori-neg. ulcers are more aggressive, characterized by high recurrence rates and increased risk of bleeding and perforation. Long-term therapy with a **proton-pump** inhibitor may be useful in these patients. Acid suppressants may also have a role in the initial treatment of patients who have a bleeding ulcer, including those assocd. with **NSAID** use. For patients who require continuous **NSAID** therapy, **proton-pump** inhibitors have been shown to heal a significantly higher percentage of peptic ulcers in eight weeks than histamine H2-receptor antagonists, and maintenance therapy with either **lansoprazole** or omeprazole reduces ulcer recurrence. Preliminary data suggest a role for **proton-pump** inhibitors in the prevention of stress ulcers among critically ill patients. **Proton-pump** inhibitors play an important role in the treatment of both H. pylori-neg. and H. pylori-pos. peptic ulcers, as well as in upper gastrointestinal tract bleeding. Further study is needed regarding their role in preventing stress ulcers in critically ill patients.

RE.CNT 59
RE
(4) Blum, R; Clin Ther 1997, V19, P1013 CAPLUS
(5) Chey, W; Am J Gastroenterol 1996, V91, P89 CAPLUS
(14) Fennerty, M; Arch Intern Med 1998, V158, P1651 CAPLUS
(18) Graham, D; Aliment Pharmacol Ther 1997, V11, P935 CAPLUS
(19) Graham, D; Am J Gastroenterol 1996, V91, P2080 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2001 ACS
AN 1999:367829 CAPLUS
DN 131:27347
TI Non-steroidal anti-inflammatory drug gastropathy: clinical results with H2 antagonists and **proton pump** inhibitors
AU Lazzaroni, M.; Porro, G. Bianchi
CS Gastrointestinal Unit, L. Sacco University Hospital, Milan, Italy
SO Ital. J. Gastroenterol. Hepatol. (1999), 31(Suppl. 1), S73-S78
CODEN: IJGAFI; ISSN: 1125-8055
PB Pacini Editore
DT Journal; General Review
LA English
AB A review with 39 refs. While the most effective strategy to prevent non-steroidal anti-inflammatory drug-related gastrointestinal toxicity is not to prescribe the medication, this option is often impractical. The use of specific agents to heal mucosal lesions or to prevent non-steroidal anti-inflammatory drug toxicity, has focused upon two approaches: replacement of prostaglandin deficiency and inhibition of acid secretion. Acid suppression with traditional ulcer healing doses of H2-blockers is effective in the cure of gastric and duodenal ulcers upon discontinuation of the offending drug. In the event the non-steroidal anti-inflammatory drug must be continued, the use of H2-RAs is assocd. with a slight decrease in the healing rate. In long-term prevention studies, H2-blockers significantly reduce duodenal ulcer rates, but are ineffective in reducing gastric ulceration. More potent acid inhibition with double-doses of H2-blockers may also reduce the risk of gastric (famotidine 80 mg) and duodenal ulcers (famotidine 80 mg or ranitidine 600 mg daily). **Proton pump** inhibitors (omeprazole 20-40 mg, **lansoprazole** 30 mg daily) appear more effective in healing

gastric and duodenal ulcers in patients continuing the offending drug. Comparative studies of omeprazole vs. ranitidine, misoprostol and sucralfate show a therapeutic gain in favor of the **proton pump** inhibition, ranging from 10 to 40%. In long-term prevention studies, omeprazole (20 mg daily) and pantoprazole (40 mg daily) have also been shown to reduce the risk of gastric and duodenal ulcers. Comparative studies of omeprazole (20 mg daily) vs. ranitidine (150 mg daily) and misoprostol (200 .mu.g daily) showed that after 6 mo' follow-up the **proton pump** inhibition was significantly superior to control drugs in reducing the risk of both gastric and duodenal ulcer.

RE.CNT 39
RE
(1) Aabakken, L; Aliment Pharmacol Ther 1990, V4, P295 CAPLUS
(17) Hawkey, C; N Eng J Med 1998, V338, P727 CAPLUS
(18) Hudson, N; Gastroenterology 1997, V112, P1817 CAPLUS
(21) Lanza, F; Dig Dis Sci 1990, V35, P1494 CAPLUS
(22) Lanza, F; Gastroenterology 1988, V95, P289 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2001 ACS
AN 1998:640174 CAPLUS
DN 130:46958
TI Omeprazole A review of its use in Helicobacter pylori infection, gastro-esophageal reflux disease and peptic ulcers induced by nonsteroidal anti-inflammatory drugs
AU Langtry, Heather D.; Wilde, Michelle I.
CS Adis International Limited, Auckland, N. Z.
SO Drugs (1998), 56(3), 447-486
CODEN: DRUGAY; ISSN: 0012-6667
PB Adis International Ltd.
DT Journal; General Review
LA English
AB A review with refs. Omeprazole is a well studied **proton pump** inhibitor that reduces gastric acid secretion. This review examines its use in Helicobacter pylori infection, gastresophageal reflux disease (GORD) with or without esophagitis and gastrointestinal damage caused nonsteroidal anti-inflammatory drugs (**NSAIDs**). Optimal omeprazole regimens for anti-H. pylori therapy are those that administer the drug as a dosage of 40 mg/day (in 1 or 2 divided doses) for 7, 10 or 14 days in combination with 2 antibacterial agents. As a component of 3-drug regimens indirect comparative studies, omeprazole was at least as effective as **lansoprazole**, pantoprazole, bismuth compds. and ranitidine. However, a meta-anal. suggests that triple therapies with omeprazole re more effective than comparable regimens contg. ranitidine, **lansoprazole** or bismuth. Omeprazole also appears to be successful triple therapy regiments used in children with H. pylori infection. In patients with acute GORD with esophagitis, omeprazole is at least as effective as **lansoprazole** or pantoprazole in promoting healing, and superior to ranitidine, cimetidine or cisapride in esophagitis healing and symptom belief. Omeprazole was similar to **lansoprazole** and superior to ranitidine in preventing esophagitis relapse in patients with all grades of esophagitis, but may be superior to **lansoprazole** or pantoprazole in patients with more severe disease. More patients with symptomatic GORD without esophagitis experienced symptom relief after short term treatment with omeprazole than with ranitidine, cisapride or placebo, and symptoms were more readily prevented by omeprazole than by cimetidine or placebo. Omeprazole was effective in healing and relieving symptoms of reflux esophagitis in children with esophagitis refractory to histamine H2 receptor antagonists. Omeprazole is superior to placebo in

preventing **NSAID**-induced gastrointestinal damage in patients who must continue to take **NSAIDs**. It is also similar to misoprostol and superior to ranitidine in its ability to heal **NSAID**-induced peptic ulcers and erosions, and superior to misoprostol, ranitidine or placebo in its ability to prevent relapse. In long and short term studies, omeprazole was well tolerated, with diarrhea, headache dizziness, flatulence, abdominal pain and constipation being the most commonly reported adverse events. Usual omeprazole dosages, alone or combined with other agents are 10 to 40 mg/day for adults and 10 to 20 mg/day for children. Conclusions: Omeprazole is well studied and well tolerated agent effective in adults or children as a component in regimens aimed at eradicating H. pylori infections or as monotherapy in the treatment and prophylaxis of GORD with or without esophagitis or **NSAID**-induced gastrointestinal damage.

RE.CNT 304
RE
(2) Adamek, R; Am J Gastroenterol 1996, V91, P98 CAPLUS
(6) Al-Assi, M; Am J Gastroenterol 1995, V90, P1411 CAPLUS
(7) Alarcon, T; Eur J Clin Microbiol Infect Dis 1996, V15, P937 CAPLUS
(9) Andersson, T; Clin Pharmacokinet 1996, V31, P9 CAPLUS
(10) Annibale, B; Am J Gastroenterol 1997, V92, P790 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2001 ACS
AN 1998:640166 CAPLUS
DN 130:46951
TI **Proton pump** inhibitors: Pharmacology and rationale for use in gastrointestinal disorders
AU Richardson, Paul; Hawkey, Christopher J.; Stack, William A.
CS Division of Gastroenterology, University Hospital, Queens Medical Centre, Nottingham, UK
SO Drugs (1998), 56(3), 307-335
CODEN: DRUGAY; ISSN: 0012-6667
PB Adis International Ltd.
DT Journal; General Review
LA English
AB A review with 251 refs. **Proton pump** inhibitors (PPIs) are drugs which irreversibly inhibit **proton pump** (H+/K+ ATPase) function and are the most potent gastric acid-suppressing agents in clin. use. There is now a substantial body of evidence showing improved efficacy of PPIs over the histamine H2 receptor antagonists and other drugs in acid-related disorders. Omeprazole 20 mg/day, **lansoprazole** 30 mg/day, pantoprazole 40 mg/day or rabeprazole 20 mg/day for 2 to 4 wk are more effective than std. doses of H2-receptor antagonists in healing duodenal and gastric ulcers. Patients with gastric ulcers should receive std. doses of PPIs as for duodenal ulcers but for a longer time period (4 to 8 wk). There is no conclusive evidence to support the use of a particular PPI over another for either duodenal or gastric ulcer healing. For Helicobacter pylori-pos. duodenal ulceration, a combination of a PPI and 2 antibacterials will eradicate H. pylori in over 90% of cases and significantly reduce ulcer recurrence. Patients with H. pylori-pos. gastric ulcers should be managed similarly. PPIs also have efficacy advantages over ranitidine and misoprostol and are better tolerated than misoprostol in patients taking nonsteroidal anti-inflammatory drugs (**NSAIDs**). In endoscopically proven gastro-esophageal reflux disease, std. daily doses of the PPIs are more effective than H2-receptor antagonists for healing, and patients should receive a 4 to 8 wk course of treatment. For severe reflux, with ulceration and/or stricture formation, a higher dose regimen (omeprazole

40mg, **lansoprazole** 60mg, pantoprazole 80mg or rabeprazole 40mg daily) appears to yield better healing rates. There is little evidence that PPIs lead to resoln. of Barrett's oesophagus or a redn. of subsequent adenocarcinoma development, but PPIs are indicated in healing of any assocd. ulceration. In Zollinger-Ellison syndrome, PPIs have become the treatment of choice for the management of gastric acid hypersecretion.

RE.CNT 251
RE
(3) Andersson, K; Gastroenterology 1992, V103, P897 CAPLUS
(9) Avner, D; Aliment Pharmacol Ther 1995, V9, P521 CAPLUS
(18) Bate, C; Aliment Pharmacol Ther 1996, V10, P547 CAPLUS
(25) Beil, W; Eur J Pharmacol 1992, V218, P265 CAPLUS
(29) Besancon, M; J Biol Chem 1997, V272, P22438 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2001 ACS
AN 1997:593947 CAPLUS
DN 127:243081
TI Efficacy of **lansoprazole** against peptic ulcers induced by non-steroidal anti-inflammatory drugs: endoscopic evaluation of ulcer healing
AU Matsukawa, Y.; Tomita, Y.; Nishinarita, S.; Horie, T.; Kato, K.; Arakawa, Y.; Ko, K.; Shimada, H.; Nakano, M.; Kitami, Y.; Kurosaka, H.
CS First Department of Internal Medicine, Nihon University School of Medicine, Tokyo, Japan
SO J. Int. Med. Res. (1997), 25(4), 190-195
CODEN: JIMRBV; ISSN: 0300-0605
PB Cambridge Medical Publications Ltd.
DT Journal
LA English
AB Beyond the obvious step of limiting use of non-steroidal anti-inflammatory drugs (**NSAIDs**), the treatment of ulcers induced by **NSAIDs** remains controversial. We evaluated the efficacy of the **proton-pump** inhibitor **lansoprazole** on **NSAID**-induced ulcers. Ulcers were endoscopically diagnosed in 47 **NSAID** users. These patients received 30 mg/day **lansoprazole**, orally, for 6 or 8 wk (6 wk for duodenal ulcers and 8 wk for other ulcers). Ulcer healing was assessed using an established classification system. The presence of IgG antibody against Helicobacter pylori was also evaluated. The antibody was present in the sera of 51% of patients (24/47). Most of the ulcers reached scarring stages S1 (healing) or S2 (good healing), and the S2 healing rate was 35%. Two H. pylori seropos. patients did not reach these stages; their ulcers were improved by H. pylori eradication therapy, followed, in one case, by medication with misoprostol. **Lansoprazole** seemed to be useful for most patients with **NSAID**-induced ulcers, but a few needed addnl. treatments.

L20 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2001 ACS
AN 1997:558828 CAPLUS
DN 127:166786
TI Oral pharmaceutical dosage forms comprising a **proton pump** inhibitor and a **NSAID**
IN Depui, Helene; Lundberg, Per Johan
PA Astra Aktiebolag, Swed.; Depui, Helene; Lundberg, Per Johan
SO PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9725064	A1	19970717	WO 1996-SE1735	19961220
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2213987	AA	19970717	CA 1996-2213987	19961220
	AU 9713239	A1	19970801	AU 1997-13239	19961220
	AU 712571	B2	19991111		
	BR 9607476	A	19971223	BR 1996-7476	19961220
	EP 814839	A1	19980107	EP 1996-944724	19961220
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	CN 1183048	A	19980527	CN 1996-193595	19961220
	JP 11501948	T2	19990216	JP 1996-525129	19961220
	ZA 9610936	A	19970708	ZA 1996-10936	19961230
	NO 9704069	A	19971017	NO 1997-4069	19970904
PRAI	SE 1996-70	A	19960108		
	WO 1996-SE1735	W	19961220		

AB An oral pharmaceutical dosage form comprising an acid susceptible **proton pump** inhibitor and 1 or more **NSAIDs** in a fixed formulation, wherein the **proton pump** inhibitor is protected by an enteric coating layer. The fixed formulation is in the form of an enteric coating layered tablet, a capsule or a multiple unit tableted dosage form. The new fixed formulation is esp. useful in the treatment of gastrointestinal side-effects assocd. with **NSAID** treatment. Enteric-coated pellets of **lansoprazole** were prepd. by using std. excipients. Tablets contained **lansoprazole** 94, microcryst. cellulose 181.8, crosslinked PVP 18.2, naproxen 250, PEG 200, sodium aluminum silicate 50, L-arginine 190, and EtOH 280 mg/tablet.

L28 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2001 ACS
AN 1999:617452 CAPLUS
TI NMI-377, a nitric oxide-donating diclofenac derivative with gastroprotective properties.
AU Bandarage, Upul K.; Saha, Joy K.; Schroeder, Joseph D.; Garvey, David S.; Mercer, Greg J.; Chen, Liqing; Glavin, Alicia; Janero, David R.; Letts, L. Gordon; Tam, S. William
CS NitroMed, Inc., Bedford, MA, 01730-1414, USA
SO Book of Abstracts, 218th ACS National Meeting, New Orleans, Aug. 22-26 (1999), MEDI-081 Publisher: American Chemical Society, Washington, D. C. CODEN: 67ZJA5
DT Conference; Meeting Abstract
LA English
AB Diclofenac, a nonsteroidal anti-inflammatory drug (**NSAID**),is commonly used for relieving the symptoms of pain and inflammation associatedwith rheumatoid arthritis and osteoarthritis. Chronic use of **traditionalNSAIDs** is assocd. with common gastrointestinal (GI) side effects includingbleeding and ulceration. Nitric oxide is known to be cytoprotective tothe gastric mucosal lining. Thus, we designed and synthesized (3-(methyl[(nitrosothiocyclohexyl) methyl]amino)propyl 2-{2-[(2,6-dichlorophenyl)amino] phenyl}acetate),a diclofenac deriv. contg. a **nitrosothiol** as the NO-donor moiety.This compd. exhibits excellent shelf-life stability and in preclinicalrodent models has been shown to have similar potency and efficacy whencompared to diclofenac, but with significantly less GI ulceration. The synthesis and biol. evaluation of will be presented.

L6 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2001 ACS
AN 1996:644843 CAPLUS
DN 125:292720
TI Role of capsaicin-sensitive sensory neurons and nitric oxide in the protective effect of lansoprazole, a proton pump inhibitor, on gastric mucosa in rats
AU Murakami, Izumi; Satoh, Hiroshi; Asano, Shoichi; Maeda, Rika
CS Pharmaceutical Research Laboratories III, Takeda Chemical Industries, Ltd., Osaka, 532, Japan
SO Jpn. J. Pharmacol. (1996), 72(2), 137-147
CODEN: JJPAAZ; ISSN: 0021-5198
DT Journal
LA English
AB The mucosal protective effect of **lansoprazole**, a **proton pump** inhibitor, was examd. in ethanol- and acidified taurocholate-induced rat gastric lesion models. The formation of gastric lesions was markedly inhibited by prostaglandin E2 but hardly inhibited by cimetidine, ranitidine and famotidine. **Lansoprazole** (3-30 mg/kg, p.o.) inhibited the formation of gastric lesions in a dose-dependent manner, with ID50 values of 8.5 (ethanol) and 4.1 mg/kg p.o. (acidified taurocholate). The protective effect of **lansoprazole** was significantly decreased by functional ablation of capsaicin-sensitive sensory neurons or prior administration of indomethacin or N.omega.-**nitro**-L-arginine Me ester (L-NAME), a selective inhibitor of nitric oxide (NO) synthesis. The inhibitory effect of L-NAME was antagonized by prior administration of L-arginine, a substrate of endogenous NO, but not D-arginine. The antisecretory effect of **lansoprazole** on the basal acid secretion in pylorus-ligated rats was not affected by any of these treatments. **Lansoprazole** (5 and 5 mg/mL) administered directly into the gastric chamber obviously increased both the prodn. of NO in the mucosa and mucosal blood flow, which was prevented by pretreatment with L-NAME. These results suggest that capsaicin-sensitive sensory neurons, NO and prostaglandins are involved in the mucosal protection afforded by **lansoprazole** possibly via an increase in mucosal blood flow, but are not involved in the antisecretory action of **lansoprazole**

L9 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2001 ACS
AN 1995:470389 CAPLUS
DN 122:222897
TI Formulations comprising antibacterial substances and antiulcer substances
IN Akiyama, Yohko; Nakao, Masafumi; Nagahara, Naoki; Iwasa, Susumu
PA Takeda Chemical Industries, Ltd., Japan
SO Eur. Pat. Appl., 20 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 642797	A1	19950315	EP 1994-306351	19940830
	EP 642797	B1	20000517		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	EP 995447	A1	20000426	EP 1999-203554	19940830
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE				
	AT 192932	E	20000615	AT 1994-306351	19940830
	ES 2145102	T3	20000701	ES 1994-306351	19940830
	CA 2131569	AA	19950310	CA 1994-2131569	19940907
	JP 07126189	A2	19950516	JP 1994-213453	19940907
	CN 1105855	A	19950802	CN 1994-109146	19940909
	CN 1051922	B	20000503		
	US 5948773	A	19990907	US 1997-863293	19970527
PRAI	JP 1993-224707	A	19930909		
	EP 1994-306351	A3	19940830		
	US 1994-303674	B1	19940909		

OS MARPAT 122:222897
AB The present invention includes a formulation which comprises an antibacterial substance and an antiulcer substance, wherein at least either of them is formulated into a **gastrointestinal** mucosa-adherent solid prepn. The formulation shows a long retention time in the **gastrointestinal** tract because of adhesion to the **gastrointestinal** tract mucosa, synergetically enhances the pharmaceutical effects of an antibacterial substance, esp. an antibiotic against Helicobacter pylori (HP) and an antiulcer substance, with very low doses of active ingredients, particularly the anti-HP antibiotic with low prevalence of side effects. For example, 2-[2-[3-methyl-4-(2,2,3,3-tetrafluoropropoxy)pyridyl]methylthio]benzimidazole 15, amoxicillin 5, behenic acid polyglyceride (HB-310) 65, and poly(acrylic acid) 15g were mixed and granulated.
IT Antibiotics
Campylobacter pyloridis
Ulcer inhibitors
(mucosa-adherent antiulcer prepns. contg. antibiotics and **proton pump** inhibitors)
IT Pharmaceutical dosage forms
(capsules, mucosa-adherent antiulcer prepns. contg. antibiotics and **proton pump** inhibitors)
IT Pharmaceutical dosage forms
(granules, mucosa-adherent antiulcer prepns. contg. antibiotics and **proton pump** inhibitors)
IT Pharmaceutical dosage forms
(solids, oral, mucosa-adherent antiulcer prepns. contg. antibiotics and **proton pump** inhibitors)
IT 57-92-1, Streptomycin, biological studies 60-54-8, Tetracycline 61-33-6, Benzylpenicillin, biological studies 114-07-8, Erythromycin 1406-05-9, Penicillin 9003-01-4, Poly(acrylic acid) 25618-55-7D, Polyglycerin, fatty acid esters 26787-78-0, Amoxicillin 32887-01-7,

Mecillinam 61477-96-1, Piperacillin 64221-86-9, Imipenem 64366-79-6
103577-45-3, Lansoprazole 103577-82-8
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mucosa-adherent antiulcer prepns. contg. antibiotics and
proton pump inhibitors)